National Library
of Canada

Canadian Theses Service

Ottawa, Canada
K1A 0N4

Bibliothèque nationale
du Canada

Service des thèses canadiennes

NOTICE

The quality of this microform is heavily dependent upon the quality of the original thesis submitted for microfilming. Every effort has been made to ensure the highest quality of reproduction possible.

If pages are missing, contact the university which granted the degree.

Some pages may have indistinct print especially if the original pages were typed with a poor typewriter ribbon or if the university sent us an inferior photocopy.

Previously copyrighted materials (journal articles, published tests, etc.) are not filmed.

Reproduction in full or in part of this microform is governed by the Canadian Copyright Act, R.S.C. 1970, c. C-30.

AVIS

La qualité de cette microforme dépend grandement de la qualité de la thèse soumise au microfilmage. Nous avons tout fait pour assurer une qualité supérieure de reproduction.

S'il manque des pages, veuillez communiquer avec l'université qui a conféré le grade.

La qualité d'impression de certaines pages peut laisser à désirer, surtout si les pages originales ont été dactylographiées à l'aide d'un ruban usé ou si l'université nous a fait parvenir une photocopie de qualité inférieure.

Les documents qui font déjà l'objet d'un droit d'auteur (articles de revue, tests publiés, etc.) ne sont pas microfilmés.

La reproduction, même partielle, de cette microforme est soumise à la Loi canadienne sur le droit d'auteur, SRC 1970, c. C-30.

NL-339 (r. 88/04)

Canada

THE UNIVERSITY OF ALBERTA

THE DEVELOPMENT OF EDUCATION IN PAPUA NEW GUINEA AND THE IMPACT OF EXTERNAL AID

1975 - 1985

by

© VINCENT JOSEPH MARTIN

A THESIS
SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH
IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE
OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF EDUCATIONAL ADMINISTRATION

EDMONTON, ALBERTA
SPRING, 1988

Permission has been granted to the National Library of Canada to microfilm this thesis and to lend or sell copies of the film.

The author (copyright owner) has reserved other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without his/her written permission.

L'autorisation a été accordée à la Bibliothèque nationale du Canada de microfilmer cette thèse et de prêter ou de vendre des exemplaires du film.

L'auteur (titulaire du droit d'auteur) se réserve les autres droits de publication; ni la thèse ni de longs extraits de celle-ci ne doivent être imprimés ou autrement reproduits sans son autorisation écrite.

ISBN 0-315-42864-3

THE UNIVERSITY OF ALBERTA

RELEASE FORM

NAME OF AUTHOR: VINCENT JOSEPH MARTIN

TITLE OF THESIS: THE DEVELOPMENT OF EDUCATION IN PAPUA NEW GUINEA AND THE IMPACT OF EXTERNAL AID 1975 - 1985

DEGREE FOR WHICH THESIS WAS PRESENTED: DOCTOR OF PHILOSOPHY

YEAR THIS DEGREE GRANTED: SPRING 1988

Permission is hereby granted to THE UNIVERSITY OF ALBERTA LIBRARY to reproduce single copies of this thesis and to lend or sell such copies for private, scholarly or scientific research purposes only.

The author reserves other publication rights, and neither the thesis nor extensive extracts from it may be printed or otherwise reproduced without the author's written permission.

(Student's Signature)

PERMANENT ADDRESS:

3 Castile Street
Wembley Downs.
Western Australia. 6019

Dated February 18, 1988

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled THE DEVELOPMENT OF EDUCATION IN PAPUA NEW GUINEA AND THE IMPACT OF EXTERNAL AID 1975 -1985 submitted by Vincent Joseph Martin in partial fulfilment of the requirements for the degree of DOCTOR OF PHILOSOPHY in EDUCATIONAL ADMINISTRATION.

Donald M. Richards

Supervisor

External Examiner

Date February 18/88

DEDICATION

This thesis is dedicated to my Mother

Dorothy Ada Phyllis Martin

who always provided me with unfailing support

and to whom I owe so much

ABSTRACT

As a newly independent country since 1975, Papua New Guinea (PNG) had to develop its education system to meet its people's changing needs, priorities and aspirations. However, with limited resources for educational development, aid was sought from external agencies. In the decade following independence, external aid became a strategic instrument in the educational development process.

This study described PNG's educational development following independence and assessed the impact of external aid on planning, financing and implementation of these activities. A systems analysis approach was used. The literature provided criteria for analyzing respondents' opinions.

The major sources of external aid were multilateral - the World Bank Group and Asian Development Bank - and, came in the form of both credits and loans; subsequent aid was in the form of concessional loans.

Aid was provided for capital assistance or technical assistance to support locally determined priority development projects. Owing to a change from an elitist to an egalitarian educational philosophy in the mid-1960s, aid-funded development activities encompassed all educational levels. Analysis of respondents' perceptions indicated that external aid had been extremely beneficial and timely to educational development. Reasons attributed to the successful management of its aid included: an insistence that all aid support the nation's development priorities; improvement in educational planning by the Department of Education; the importance of maintaining effective communication with the aid agencies; and the importance of familiarization with donors' aid policies and procedures. Adverse issues which required attention included: reduced government support for aid-assisted projects; lack of provincial commitment to improve educational planning and management; lack of inter-departmental coordination and cooperation;

failure to provide detailed plans for implementation of aid-assisted projects; and failure to make more effective use of staff development resources.

In the future, there needs to be greater collaboration between national and provincial educational authorities to resolve differences in educational priorities. More emphasis also needs to be given to non-formal education for of out-of-school youth and unschooled rural adults; the Department has an important leadership role to play. General guidelines regarding the planning, negotiation and implementation of education aid were advanced.

ACKNOWLEDGEMENTS

The writer wishes to gratefully acknowledge the guidance and advice received from my thesis advisor, Dr. D. M. Richards and from other members of the committee, Dr. C. S. Bumbarger, Dr. K. L. Ward and Dr. M. K. Bacchus. His appreciation is also expressed to Dr. E. E. Falkenberg for agreeing to serve as external examiner, and Dr. D. A. MacKay and Dr. J. E. Seger for serving as members of the Oral Candidacy Committee.

Appreciation is extended to the PNG Department of Education for their approval and cooperation with this study. Also the writer is much indebted to colleagues and friends in Papua New Guinea and Australia he was priviledged to interview or receive information from. Their willingness to entertain an interview, to relate events as they saw them, and to permit use of their information, contributed, in no small measure, to the accomplishment of his task.

Financial assistance received from the Department of Educational Administration at the University of Alberta, in the form of a Graduate Assistantship, is also acknowledged and appreciated.

Finally, the writer takes pride in acknowledging the debt he owes, Naomi, his wife, for her constant support and encouragement, and to Caroline, his daughter, for her tolerance and good cheer throughout.

TABLE OF CONTENTS

Chapter Page

I. BACKGROUND TO THE STUDY ---------- 1

Setting for the Research ---------- 3

Purpose of the Study ---------- 4

Significance of the Study ---------- 5

Definition of Terms ---------- 6

Limitations ---------- 8

Delimitations ---------- 9

Organization of the Study ---------- 9

II. RESEARCH DESIGN AND METHODOLOGY ---------- 12

Research Orientation ---------- 12

Case Study Approach ---------- 13

Research Design ---------- 14

Document Search ---------- 15

Interviews ---------- 16

Data Analysis ---------- 19

Validity and Reliability ---------- 20

Ethical Considerations ---------- 22

Summary ---------- 22

III. LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK ---------- 23

A Systems View of Education ---------- 23

Development and Education ---------- 25

Education for Social Development ---------- 27

Development and the Educational Dilemma ---------- 28

- Reform and the Call for a New Economic Order ---------- 29
- Education and Rural Development ---------- 30

The Aid Relationship ---------- 31

- External Aid as Seen fom Different Perspectives ---------- 31

External Aid and Education ---------- 32

Terms of Aid and Its Contradictions ---------- 34

Understanding the Role of External Aid ---------- 35

Trends in the Volume of Aid to Education ---------- 36

The Importance of Educational Planning ---------- 37

Determining Educational Priorities for Externally Funded Projects ---------- 39

Technical Assistance as a Form of Aid ---------- 39

The Role of Overseas Fellowships ---------- 40

Conceptual Framework ---------- 41

Summary ---------- 43

IV. PNG AID POLICIES AND AID STRATEGIES ---------- 44

Macro-Economic Review ---------- 44

- National Development Strategy ---------- 46
- The Development Strategy and Education ---------- 47
- National Public Expenditure Plan ---------- 48
- Medium Term Development Strategy ---------- 52

PNG's Aid Policy ---------- 53

A Brief Historical Note ---------- 56

- The Policy of Gradualism ---------- 57
- The Aid Relationship with Australia ---------- 59
- The Jackson Report ---------- 62

Aid From Other Sources ---------- 66

Summary ---------- 69

V. REVIEW OF DEVELOPMENTS IN PNG EDUCATION SYSTEM ---------- 72

The Colonial Period ---------- 72

Educational Developments in Papua ---------- 73

Educational Developments in New Guinea ---------- 74

Educational Developments After World War II ---------- 76

Educational Developments 1975 - 1985 ---------- 81

Developments in Structure ---------- 83

Developments at the Primary Level ---------- 84

Developments at the Secondary Level ---------- 89

Lower Secondary ---------- 89

Upper Secondary ---------- 92

Developments in Technical Education ---------- 93

Developments in Non-Formal Education ---------- 94

Developments in Teacher Education ---------- 98

Developments in Administration ---------- 99

Summary ---------- 103

VI. SOURCES AND PURPOSES OF EXTERNAL AID ---------- 107

Control and Complexities of Educational Finance ---------- 107

Expenditures in Education 1975-1985 ---------- 110

Major Sources of External Assistance 1975 - 1985 ---------- 117

The World Bank Group ---------- 118

Asian Development Bank ---------- 120

United Nations Development Programme ---------- 121

UNESCO -- 122

European Economic Community ------------------------------------- 123

Bilateral Aid To Education -------------------------------------- 124

The Major Aid Projects 1975 - 1985 ------------------------------ 124

Education I --- 126

East Sepik Rural Development Project ---------------------------- 128

Southern Highlands Rural Development Project -------------------- 131

Education II Project -- 132

Technical Education Project ------------------------------------- 135

Education III Project --- 138

Summary --- 142

VII. THE CONTRIBUTION OF EXTERNAL AID TO THE PNG EDUCATION SYSTEM ---------------- 144

Clarity and Consistency of Educational Objectives --------------- 144

Facility in the Procedures for Requesting and Receiving Educational Aid --- 148

Adequacy of Loans and Grants to Meet Local Resource Needs ------- 153

Flexibility of the Conditions Attached to the Loans ------------- 156

Suitability of the Skills and Functions of External Personnel --- 160

Novelty of Problems Diagnosed and Innovativeness of Solutions ---- 163

Appropriateness of Training Assistance Programmes --------------- 167

Summary --- 171

VIII. MAJOR ISSUES EMERGING FROM THE FINDINGS ---------------------- 175

Aid Supporting PNG's Development Priorities --------------------- 175

Improved Educational Planning Techniques ------------------------ 177

Maintainance of Communication with External Donors -------------- 180

Facility with Procedures for Requesting and Receiving External Aid ---------- 182
Uncertainty of Future Levels of External Aid to Education ---------- 183
Need for Improvement in Implementation ---------- 185
Need for Improvement in Coordination Between Government Departments ---------- 186
Need for Improvement of Staff Development ---------- 189
Imbalance Between Formal and Non-Formal Education Provision ----- 191
Summary ---------- 193

IX. SUMMARY, CONCLUSIONS AND IMPLICATIONS ---------- 195
Reiteration of the Background and Purpose of the Study ---------- 195
Summary of the Findings ---------- 196
Research Problem 1 ---------- 196
Research Problem 2 ---------- 197
Research Problem 3 ---------- 197
Research Problem 4 ---------- 198
Research Problem 5 ---------- 200
Research Problem 6 ---------- 201
Research Problem 7 ---------- 202
Conclusions ---------- 202
Educational Development Priorities ---------- 202
Non-Formal Education ---------- 203
Provincial Educational Planning ---------- 204
Lessons on Planning and Implementation of External Aid Project ---------- 205
Evaluation and Research ---------- 207

Implications for Further Research -- 208

BIBLIOGRAPHY -- 211

APPENDIX A. PNG'S EIGHT POINT IMPROVEMENT PLAN --------------- 221

APPENDIX B. STRATEGIC OBJECTIVES OF PNG'S NATIONAL PUBLIC EXPENDITURE PLAN ---------------------------------- 223

APPENDIX C. LIST OF PERSONS INTERVIEWED ----------------------------- 225

APPENDIX D. SAMPLE INTERVIEW SCHEDULE ------------------------------ 228

APPENDIX E. PAPUA NEW GUINEA - COUNTRY INFORMATION ------- 231

LIST OF TABLES

Table **Page**

1. PNG's Rate of Real GDP Growth, 1973 -1984 51
2. Australian Aid to PNG Under the Third Five Year Aid Agreement, 1986 - 1990 65
3. Aid Flows to Papua New Guinea, 1980 - 1985 67
4. Papua New Guinea Schooling Statistics, 1960 - 1985 85
5. Enrollment Increases in Grade 7 in PNG Provincial High Schools, 1975 - 1985 90
6. Localization Rates in PNG Education System, 1970 - 1985 100
7. PNG Government Expenditures on Education, 1965 -1984 111
8. Expenditure of Department of Education, by Expense Items, 1985 113
9. Public Recurrent Expenditure on Education, by Level and Type, 1978 115
10. Major Educational Projects Assisted by External Aid, 1975 - 1985 125
11. Education I Project, Comparative Analysis of Expenditures 127
12. East Sepik Rural Development Project, Comparative Analysis of Expenditures 129
13. Education II Project, Comparative Analysis of Costs, By Item, at Appraisal 133
14. Technical Education Project, Comparative Analysis of Costs, by Category, at Appraisal 136
15. Education III Project, Comparative Analysis of Costs, by Components, at Appraisal 139

CHAPTER I

BACKGROUND TO THE STUDY

Papua New Guinea is a young country; it achieved its independence from Australia in September 1975. Within a short period it has had to remould the Australian education system being used to one which suited its own needs.

At independence there were many serious deficiencies in the capability of the National Education System (NES) to meet the changing needs and priorities of the new nation. Consequently, the production and adoption of the 1976-80 Education Plan was the first attempt for education planning to provide the much needed direction for reform in goals, structure, operations and programmes to guide educational leadership at all levels into the next decade.

However, Papua New Guinea was to learn that political independence would not guarantee economic independence and so, like many other developing countries before her, she would need to acquire resources from outside the country in order to accelerate development. It was reasoned by the Government that the receipt of aid in the short-run would help the country build the necessary social and economic infrastructure and reach self-reliance in the long-run.

Papua New Guinea thus proceeded to make use of various forms of international assistance for education. Probably the two most important sources of aid were multilateral assistance - other than that from Australia - which came from the World Bank Group (IBRD and IDA), and the Asian Development Bank. (It is acknowledged that Australia's aid contribution to the PNG economy has been far more substantial than any other source, however, until recently, because of its unconditional nature, it has been impossible to show a direct link to education).

The assistance, in monetary terms, represents only a small proportion of the country's total expenditure on education. However, efforts expended in recent years in planning and negotiating educational aid indicate its growing importance as a strategic instrument in the development process in Papua New Guinea.

It is obvious from the review of related literature that external aid has great potential in assisting less developed countries in the achievement of their educational goals. But if this potential is to be realized to the fullest, solutions must be found for the accompanying problems related to the planning, negotiating and implementing of external aid. Coombs (1985:300) notes that in assessing external aid to education "it is essential to know how the aid was used." Thus to investigate the extent aid has contributed to the educational development of Papua New Guinea required answers in these areas: the specific purposes for which it was used, whether it was used efficiently and if the aid process has been improved.

Clearly, the concern with external aid can be viewed from two perspectives. Firstly, there is the viewpoint of the recipient country whose major concern is with the identification and planning of development activities which best suit its long term goals, and which may require external funding. In this arena the problem becomes not only identification and prioritizing of needs, but how best to allocate aid to obtain maximum benefits from amongst competing needs. Conversely, from the donor's point of view, the critical problem may well be: how might the administration of external aid be conducted so as to improve the effectiveness of implementation in the host country ? Of course another more sinister interpretation could well be that it suits the purposes - educational, economical and political - of the donor at the expense of those of the recipient. Thus, it is the contention of the writer that helpful insights into these types of issues may be obtained by systematically analyzing and assessing the experiences of a number of countries.

Setting For the Research

The educational development experience of Papua New Guinea during the period 1975-84 makes it an appropriate vehicle for such an investigation. During the relatively brief colonial period elementary education, for the most part, was left to the various Christian missions. Secondary education was also slow in coming. For example, by the early 1960s only 149 students had been enrolled in the first few secondary schools.

However, in the decade since independence, there has been a dramatic increase in educational growth: elementary enrollments have risen 45% (from 236,000 to 345,000) and secondary enrollments are up 68% (from 28,000 to 47,000) in the period 1975-1985. Such an acceleration in education provision would be unrivalled anywhere in the South Pacific region - perhaps even within the developing world.

Whilst recognizing this quantitative improvement, the new nation was also searching for its own identity, so relevance as well as other qualitative aspects began to assume more significant roles than ever before. During this important period of growth, external aid was seen to play a prominent part in the educational development activities of the nation. It is therefore important to determine what role external aid has played and, can continue to play, in the educational development of this new island state. By focussing on both the issues and process of external aid to education in PNG this study will contribute to improving the effectiveness of the aid-process in this country, as well as to the body of literature on external aid to education in developing countries in general.

Purposes of the Study

The main purpose of this study was to describe the development of education in Papua New Guinea between 1975 and 1985, and assess the contribution of external aid. Subsumed under the main purpose are two further objectives: to identify the major educational projects that received external aid, and to assess the external contribution to planning and implementation of these activities in light of appropriate criteria selected for these objectives.

* The descriptive part of the case study is background and contextual, and will be guided by the following questions:

Question 1

What were the major educational developments in Papua New Guinea during the period 1975-85, particularly those concerning educational policies, programmes, administration and finance ?

Question 2

What were the local resource constraints in the implementation of the planned educational developments during this period ?

Question 3

What were the major forms of external aid that Papua New Guinea successfully negotiated and received during the period 1975-85 ?

* The analytical part of the case study will be guided by the following questions:

Question 4

When and for what purpose was the aid requested ?

Question 5

What factors constrained either the negotiation or implementation processes ?

Question 6

What has been the nature of the contributions of external aid - as perceived by those interviewed - to the overall educational development effort ?

Question 7

What salient issues emerge from the findings, and what are the decision-making implications (either negative or positive) for the recipients, in the use of external aid as an instrument of educational development ?

Significance of the Study

If external aid is to make a significant contribution to the educational development efforts of a country, then the problems associated with bringing the aid to fruition will need to be identified and more clearly defined so that research efforts can be directed towards finding substantive solutions to them. Unfortunately, the literature on external aid to education shows that most of the studies done to date have such variations in focus, perspective and approach as to limit the extent to which generalizations can be made about aid's contribution to educational development. It therefore limits the comparisons which otherwise may have been made between countries with geographical and cultural differences.

The need exists, therefore, for more comprehensive case studies of countries, the accumulated findings of which may provide a broader basis for generalizations about the role of educational assistance in developing countries. It is in this respect that the present case study makes a contribution.

In addition, it is hoped that this study will be of importance to the practice of educational administration in developing countries and to educational administrators with an interest in the planning and management of external aid. Its contribution is through identification and systematic examination of the issues, procedures, mechanisms and constraints that are involved in the use of external resources in the planning and implementation of educational change.

Also, it is the researcher's understanding that there appears to have been no previous attempt at an assessment of external aid in the educational development efforts of any country in the South-West Pacific region. Therefore, this study would be a contribution in filling what appears to be a major gap in the research literature.

Definitions of Terms

Many of the terms used in this proposal have disparate connotations for different people. It is therefore essential to provide explicit operational definitions of some of the key words which will be used.

Development

The term development, when it refers to education, denotes what is essentially a deliberate and planned effort to alter educational policies and goals, the structure of the educational system, and educational programmes and processes. Such terms as "reform", "modernization" and "change", have been used to describe the same basic processes.

Technical Assistance

Technical assistance is external aid (either bilateral or multilateral) which may take the following forms: (1) the supply of educational advisors or expert missions, (2) expatriate personnel (or teachers), (3) fellowship awards to study abroad or in Papua New Guinea, (4) sponsorship of local training programmes. In aid projects, external agencies may provide one, or a combination of the above.

Capital Assistance

Capital assistance is external aid which is generally provided for civil works or the provision of equipment and materials.

Grant

This definition is described by Asher (1961) as "a transfer of resources with no obligation concerning payment," although sometimes the agency providing the grant may attach conditions regarding the receipt and use - in this case it is a conditional grant. Where there is no stipulation regarding its use, it is an unconditional grant.

Grant Element

The subsidy contained in an aid loan is described as the grant element. and is defined by Makis and Dahanayake (1985:4) as "the difference between the face value of a loan and the present value of all its future repayments in the form of amortization and interest, discounted at a market rate of interest." They explain that expressed as a percentage of the face value of the loan, the grant element indicates what percentage of the face value of the loan will be repaid in present value. For example, a loan with a grant element of, say, 84% means that the recipient country will repay only 16% of the loan in present value.

Loan

This refers to resources which have not been granted but loaned, i.e., the lender will in due course be repaid with interest (or without) by the borrower - sometimes after a 'grace' period. '*Hard*' loans refer to those given at market rates of interest and or short repayment periods whereas '*soft*' loans are given at concessionary or low rates of interest with long grace and repayment periods.

Tied Aid

External aid in the form of bilateral loans or grants which require the recipient country to use the funds to purchase goods and/or services from the donor country - the aid is said to be '*tied* ' to purchases from the assisting country.

PNG Educational System

Defined for the purpose of this study, the PNG educational system will include all formal institutions providing education and training programmes approved by the PNG Department of Education. It will not include the universities or those educational institutions sponsored by other government ministries.

Limitations

1. A major limitation of this study is the fact that external aid is only *one* of the many factors involved in the educational change efforts of Papua New Guinea. Therefore, any conclusions that are made regarding causal relationships between external aid and the processes and outcomes of educational change will require some caution.
2. A second limitation of the study derives mainly from the difficulties and problems inherent in data collection. These have relied mainly upon examination of Government documents and agency reports and interviewing. It is most pleasing to note that full access and total cooperation was given the researcher.
3. In the case of the interviewees, because of the varying positions of authority and different perspectives held, there is the possibility of distortion or bias to be considered. That is to say, some of the interviewees may have used hindsight

to supply motives and explanations for particular events that are different from what really happened, in order to make sense of the data for the researcher.

4. Several prospective interviewees, both former as well as those still in the employ of the Government, declined to participate in the study.
5. Because of the transient nature of the expatriate population in Papua New Guinea, several former government officials were unavailable for an interview.

Delimitations

1. This study is delimited to a description of the major developments in one educational system and to the major forms and sources of external assistance (excluding the Australian grant) which were allocated to these developments.
2. The study is further delimited to the period 1975-85, the time when Papua New Guinea gained its independence and was in a position to initiate and negotiate its own aid with the major international lending agencies.
3. A final delimitation is that the judgements about the contribution of aid will be seen primarily from the perspective of the recipient country, rather than that of the donor agency.

Organization of the Study

The introductory chapter provides a background and introduction to the general issue of external aid to education and places it within the Papua New Guinean context in which it will be examined. It identifies the purpose of the study as describing and reviewing the role of external aid in the development of the PNG educational system in the decade since political independence. The perspective outlined was that in the acceptance of external aid there are usually accompanying problems to which solutions must be found so that the full potential in assisting the nation with its development will be realized. The significance of the study was established for aid recipient nations, the practising educational administrator and the theory of educational administration. Investigation of the study involves seven questions. The chapter has also indicated how some terms will be used and the reasons for exercising caution in interpretation and use of the findings.

Chapter II presents a description of research design and methodology used in the study. It discusses the researcher's own research orientation and justifies the selection of the case study approach. It also outlines data analyses and addresses the issues of validity and credibility.

In Chapter III, a literature review is presented on related aspects of external aid to educational development so as to provide the basis for the development of both a conceptual and analytical framework.

Chapter IV looks at Papua New Guinea's aid policies and aid strategies by reviewing developments in the economy since independence, and by reviewing its colonial relationship with Australia.

Chapter V presents a brief overview of how the educational system developed during the colonial period of each territory, and progress made after World War 2. It discusses in greater depth the planned educational developments and accomplishments since independence.

Chapter VI looks at the sources and complexities of educational financing in PNG, as well as providing a view on trends in educational financing in the last decade. The last section of the chapter identifies the major sources of external assistance to PNG, and describes each of the major development projects for which aid has been provided.

Chapter VII provides an assessment of the opinions and judgements of respondents in order to reveal their perceptions of the contribution of external aid to PNG educational development efforts.

Chapter VIII identifies and discusses the major issues related to external aid in the planning and implementation of educational change in PNG.

The final chapter, presents a summary as well as a conclusion and implications arising from the findings.

CHAPTER II

RESEARCH DESIGN AND METHODOLOGY

To acknowledge the writer's own subjective experience and frame of reference, and to allow the reader the opportunity to assess any distortion, an attempt is made to outline the stance from which this study was conducted.

Research Orientation

Social scientists view the world differently, and the meta-theoretical assumptions they hold about the nature of science and society underlie their fundamental differences. Depending upon the ontological and epistemological assumptions they hold about the social world and human knowledge, social scientists may be located on a map of four world views of paradigms: radical humanist, radical structuralist, interpretive and functionalist (Burrell and Morgan,1979:23). Others, like Guba (1985) simply refer to two contrasting views: positivistic and naturalistic.

Bogdan and Biklen (1982:30) suggest that a paradigm is "a loose collection of logically held-together assumptions, concepts, or propositions that orient thinking and research." The writer acknowledges that the considerable debate over paradigms (i.e., one's basic frame of reference for interpreting the world) is unlikely to be resolved. The research orientation adopted for this study can be placed in the naturalistic (or interpretive paradigm). The researcher considers this paradigm appropriate in that one of the major objectives of the study is to interpret the assessments made by respondents in assessing the external contribution to the planning and implementation of aid funded projects. To achieve this, qualitative methods have been used because they illuminate multiple realities, rather than define a single reality. Moreover, heavy reliance on perceptual data implies a naturalistic view. The primary analytic framework will be interpretative and inferential rather than deductive and hypothesis testing. This research orientation is deemed suitable by the researcher because it fits both the nature of the questions under investigation, and the particular methodology being employed. In addition, this orientation accords with many scholars. Lincoln's (1985) emerging paradigm for research, and Willower (1986:35), both suggest there is a place for many different perspectives on reality, with each contributing something. Morey and Luthans' (1984) argue that both emic (insider's) and etic (outsider's) orientations are needed for a more complete research perspective.

Case Study Approach

The research design for this study can be considered to be based on the case study approach. Bogdan and Biklen (1982:58) define a case study as a "detailed examination of one setting, or one single subject, or one single depository of documents, or one particular event." The study outlined in this thesis will be considering developments in the Papua New Guinea educational system during a particular time period, i.e., the post-independence decade, 1975 - 1985. Yet at the same time, it must be recognized that the education system as such encompasses a number of constituent parts, and is itself only a part of one sector of governmental activity. Thus this study focuses on the external aid process from the national Department of Education's perspective.

Several writers have favoured the case study in the area of management of organizations and in the related areas of change in organizations. Kennedy (1978) and Stake (1976) comment on the strengths of the case study approach with respect to depth of understanding and/or precision of description. Shaw (1978) suggests that the case study approach makes it possible to focus on how people deal with specific problems. In addition, Herriott and Gross (1979:354) believe that the method "constitutes a highly useful mechanism to describe and analyze the complexities and realities of change efforts and the personal, social and cultural factors that influence them."

Thus the case study methodology has been selected because it appears to be more appropriate than the "controlled" experiment approach for studying the inputs, processes, and outputs involved in policy developments in a large organization. As Meriam (1985:210) stated:

> The case study offers a framework for investigating complex social units containing multiple variables. Grounded in a real life context, the case study as a holistic, life-like account offers insights and illuminates meanings that expand the experiences of its readers.

Research Design

The type of research undertaken was essentially qualitative in nature. Collins and Noblit (1978:26) assert that qualitative research is particularly well suited to policy development studies because

> field studies reveal not static attributes but understanding of humans as they engage in action and interaction within the contexts of situations and settings. Thus inferences concerning human behaviour are less abstract than in many quantitative studi~~es, and one can better~~ understand how an intervention may affect behavior in a situation. Field studies are better able to assess social change than more positivistic designs, and change is often what policy is addressing.

According to Rist (1982:440), educational researchers have come to the conclusion that "it is dangerous politically and intellectually to rely on outcome measures while one is left to *guess* at the process."

The approach to be adopted for this study will focus analysis in three main areas:

a. reforms and changes which have occurred in the educational system;

b. the degree of involvement of external aid in the planning, implementation and financing of these development activities; and

c. the significance and contribution of external aid to the educational development efforts.

In order to investigate each of these three areas, it was necessary to proceed in two stages. First the literature in various disciplines (Educational Planning, Educational Development and International Aid and Cooperation) was reviewed for the purposes of developing a theoretical base, determining the research questions, and providing an analytical framework for the preparation of this study. The second stage, involved the actual field research, which was started in late-January 1987, and which necessitated the researcher returning to Papua New Guinea for about three months. Data were collected primarily by examination of relevant documents and this was complemented by interviews with decision makers and various individuals who may have been involved in the area of development aid.

Document Search

A document search is an important adjunct to almost any research, but in the case of a study of an organization (in this case the PNG educational system) it provides an extremely important source of information about the organization in its own right.

To gather the most reliable factual data available, extensive use was made of as many sources of information as possible. In this regard each interviewee was asked his opinion as to documents which might be of use. The researcher asked for access to all documents he thought might be of use, and so documents were collected (or copied) during the data collection stage in Papua New Guinea. Access was gained to the Department of Education's files and their research library, the New Guinea collection of the University of Papua New Guinea's library, the Papua New Guinea National Library , and IASER's[1] library. At no time was the researcher denied accessibility to documents from official government sources. So, essentially documentation came from two types: 1) primary sources - official Government policy, minutes, reports, recommendations; 2) secondary sources - position papers, published and unpublished articles, personal reports, evaluation reports, newspaper clippings.

Some mention must be made about concern for accuracy and reliability of statistics and figures reported by various line departments in their official publications. For various reasons, statistics quoted are often at variance with each other and must be held suspect. In instances where wide variances are found, the researcher has opted to use what he considers the best estimation or approximation.

Because this study was, by nature, historical, the main purposes were to explore and describe. In this respect, documentation proved to be a very valuable data source, and as a consequence, document analysis played an important part in the study.

Interviews

In addition to document analysis, considerable use was made of interviews. They allowed for validation of data obtained from the documents, provided a richer perspective, and tapped the advantages of qualitative material. Interviews were held with a selected number of (a) Papua New Guinean nationals; and (b) expatriate personnel who are (or were) employed by the Papua New Guinea Government to ascertain what they considered to be the major contributions of external aid to the nation's educational development efforts. It was reasoned that these data would not only help by assisting to interpret the document findings, but in addition it would provide a means of cross validation.

---

[1] Institute of Applied, Social and Economic Research

In the selection of interviewees, it was important that their opinions reflect a varied perspective on which they were questioned. Thus, ideally they should be experienced and informative about: major developments in education since 1975; their participation in external aid planning, negotiations or implementation; and their opportunity to participate or influence educational decision making at the national level.

In an attempt to meet these criteria, a reputational technique of selection was used. Three "strategically placed administrators" (Selltiz et al., 1976:94) were requested to generate names of people who best met these criteria. In addition, several key informants were asked to identify others who would be able to provide information on specific issues. From this population, a purposive selection was made of approximately twenty five subjects to interview. Of this total, two declined to be interviewed and one had left the country and failed to respond to the reseacher's request for assistance. Among those interviewed were senior executives from the Departments of Education, Finance and Planning, Personnel Management as well as representatives of the Faculty of Education at the University of Papua New Guinea and the Papua New Guinea Teachers' Association.

The semi-structured interview mode was adopted because as Gordon (1975:61) advises it gives "the interviewer some choice as to the order of the questions, freedom to attempt alternative wordings of the same question, and the freedom to use neutral probes if the first response to a question is not clear, complete or relevant." Other important advantages include: greater respondent cooperation because of the personal contact and the reluctance some may have of putting their views into writing; the ability to guide the interpretation of the questions in order to ensure a uniform meaning; and the additional information gained from observation of the subject in the interview situation.

The basic format of the interviews were open-ended questions. As Ary et al. (1985:343) point out "The open-ended question is preferred for more complex questions where the researcher is interested in identifying the subject's understanding of an issue, the frame of reference used in responding, or motivations underlying the response."

The researcher personally conducted all of the interviews. Only one was less than an hour, most lasted between one and two hours and several went beyond three hours. Each respondent was given a copy of the introduction to the research topic, the research questions which were being investigated, and an interview schedule several days prior to the appointed interview. The interviews were flexible so that the interviewer could prompt, probe and seek further explanation. Since the backgrounds of the respondents were many and varied, it was not always possible to rigidly follow the schedule. Instead the schedule was used as a flexible tool allowing the researcher to tap subjective experiences and concerns and to follow-up hints.

Although extensive use has been made of the comments and judgements of those interviewed, it should be pointed out that any information which appeared to be highly biased or at variance with majority expectations and observations was checked and cross-checked with other sources in an effort to ensure a high measure of validity and reliability.

Finally, it must be recognized that the researcher is a citizen of a developed country from the same geographical region. Because he has been directly involved in the administration of external aid in Papua New Guinea for a considerable time, he brings to this study preconceived notions about the problems to be investigated. Much caution has been exercised so that these preconceptions did not influence the way in which the data have been analyzed and interpreted. In this regard, agreement was sought from each interviewee to have their interview audio-recorded. Since no objection was received from any of the interviewees, a transcript of each recording as verification of accuracy and meaning was produced to aid the researcher in the data analysis stage.

Data Analysis

The method of data collection and analysis in this study is recommended by Good (1972:186). It combines both chronological order and topical method of treatment of data. That is, the chronological periods in which major educational developments occurred were identified by using the following topics:

- developments in educational policy
- developments in educational financing
- developments in organizational structure, administration and management
- developments in specific programmes
- developments in the teaching-learning process

Each of these topics was then treated in relation to the chronological periods and to the involvement of external aid. The researcher felt that this particular approach was helpful in gaining a better understanding of the sequence, dominant characteristics and central concerns of the country's educational development process.

For the purposes of analysis and synthesis of the data concerning the contribution of external aid, the information was classified according to the sources and functions for which aid was negotiated and allocated. This approach, which has also been used by Cerych (1967), Burke (1975) and Peters (1976), has been found to be especially fruitful for gaining insights into the planning and implementation of aid. It was often possible for data collection, coding and analysis to be carried out concurrently. This was because understandings derived from data analysis of the document search was used to design specific interview questions and, likewise, it was necessary that some interviews required a further examination of the documents. Thus in this study data analysis was not always a linear process.

With regard to the treatment of respondents' opinions regarding external aid's contribution to development, the information was analyzed using similar criteria to Amuzegar's (1966) study of external assistance. This approach is considered to be an appropriate method for the classification and examination of various aspects of aid to education (Cerych, 1967; Burke, 1975). The criteria used in the analysis are discussed later in the 'Conceptual Framework' section.

Validity and Reliability

In any research study or scientific enquiry the questions of validity, reliability and objectivity must be answered. Lincoln and Guba (1985:247) state that in order to prove the "trustworthiness" of the findings, the researcher has to ensure that the findings are credible (internally valid), transferable (externally valid), dependable (reliable) and confirmable (objective).

Credibility has to do with the degree of confidence in the findings. Thus it was crucial that the researcher's interpretations and analyses agree with the subject's views. Triangulation and member checks have been used to ensure this. Denzin (1970:297) defines the technique of triangulation as the "combination of methodologies in the study of same phenomena." He suggests there exists four different modes: *sources, methods, investigators* and *theories*. For this study, data were collected using two methods (semi-structured interview and document analysis) and six sources (educational administrators, project managers, evaluators, senior civil servants, university lecturers, and documents).

This multi-method and multi-source approach not only helped to corroborate data from one method or source with data from another, but it also added richness and depth to the topics under study. Other techniques used to promote believability of the findings have been: the researcher's prolonged engagement and immersion in the whole culture of external aid; ensuring that the original data collected were available for later examination and agreement; checking with key respondents of the study to ensure that the researcher's interview transcripts allign with their views of the situation.

It is the researcher's belief that transferability is not always possible in qualitative enquiries because of the context-specific nature of social interactions which take place. However, by using "thick descriptions" so full it is possible for others to make "reasoned judgements" concerning the fit between that which is being studied and other contexts (Geertz,1973) it is possible to allow consideration of the question of transferability to another setting equally well described. In this study the researcher has attempted to provide detailed descriptions of circumstances, settings and processes where possible to provide for external validity.

Dependability refers to the stability of the data. To ensure this, the researcher has employed triangulation and provided an audit trail so that examination of the methods of data collection and analysis can be made. There are sufficient records and data for this study to be replicated.

Lincoln and Guba (1985:318) say that confirmability can also be provided by triangulation. Thus the process of *triangulation* was an important means of assuring that the findings of the study are valid and reliable. As explained previously, in this study several different methods have been used to address the same theoretical questions. By examining multiple and various sources of documents, by interviewing different people in relation to the same issue, and by seeking the perceptions of both insiders (of the

Department of Education) and outsiders, the researcher has provided the necessary cross-validation and ensured the reliability of information that dissertations require. Thus, confidence in the study's findings has been enhanced by minimizing the error in each method and by comparing information from multiple sources.

Ethical Considerations

With regard to the ethics of this study, the researcher was directed by the guidelines of the University of Alberta General Faculties Council. Although written consent of respondents was not sought, each was fully briefed on the nature and purpose of the study. Confidentiality and anonymity was assured. In addition, each understood that consent to participation in the study was by choice and that withdrawal at any time would not incur any penalties of any kind. Also the right not to answer a particular question or to withdraw information was guaranteed.

Summary

This chapter has outlined the particular research orientation of the researcher and has described both the research approach and design used in the conduct of this study. The development and use of the instrument was described, and an explanation given of the methods of data collection and analysis. A discussion on how validity and reliabilty were maintained was given, and comments were made on ethical considerations of the conduct of the study.

CHAPTER III

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

This section will review the literature on external aid to education by looking at certain aspects of development and education, educational planning and the role and problems of external aid to education. These topics were chosen for review for three reasons: firstly, in defining the role of external aid in educational development in the Third World there is the need to consider interrelationships of education in development to the social, economic and political aspects of society. Secondly, there is the need for consideration to be given to the capacity of any country to plan and implement its long range educational objectives. Lastly, there is the need to uncover the possible links between external aid and education.

Since this study was conducted using a systems approach it was deemed necessary to review this literature from an educational perspective so as to develop a conceptual framework to guide the organization of the study. In addition, the total literature review process enabled the researcher to formulate and propose some research questions.

A Systems View of Education

Gilliland and Gilliland (1978:1) suggest that "General Systems theory is a philosophy or a conceptual framework which explains empirical relationships". As such, they explain, it is a discipline comprised of a set of principles about the way a system (any system) functions. In addition, Dye (1972:19) further elaborates by describing a system's most basic features: the capacity to achieve goals, to be adaptive to a changing environment, to maintain its relationships with other social systems, and to integrate the elements or components of which it is combined.

Following von Bertalanffy's (1968) introduction of the **general systems theory** over two decades ago, the study of systems expanded from concerns of simple mechanistic systems to the study of applications of the systems notion to a whole range of new ideas. One derivation relevant to formal human work organizations (which included education) was the **open systems theory.** The central propositions of this theory are concerned with inputs, outputs, processes, systems boundaries, differentiation and integration of subsystems, boundary transactions and system maintenance processes. One variant on this incorporates the goal model in the sense that the focus is on optimizing system-environment relationships: "effectiveness implies the output of goods or services to the environment of kinds and amounts that assure continuing and adequate inputs to the system" (Cameron and Whetten,1983:57).

Hence, from the open systems theory, organizations may be interdependent on each other's outputs in order to function and attain self interest goals. In support of this view, Scott (1981:157) says "the fact that organizations do not entirely control all of the resources necessary for goal attainment or survival leads them to become interdependent with other systems." This interdependence illustrates the important point that no organization is self-sufficient, and all must secure a continuing supply of resources from the environment. In order to do this, organizations contact and interact with each other.

Several writers have employed a "systems analysis" approach to the study of education in developing countries [Cerych (1967), Coombs (1968),Adams (1970), and Peters (1976)]. Coombs in particular, justifies this choice: "such a perspective permits us to focus on an organized process in its entirety" (1968:8); "it allows the researcher to concentrate upon selected and critical indicators and relationships within the system and between the system and its environment" (1968:8); and "that it is possible to view the education system as receiving inputs which undergo certain processes so as to to realize the objectives of the system" (1968:10). With regard to this study, the inputs which are of concern are the capital and technical assistance which were negotiated and received external to Papua New Guinea. Attention was also given to the sources of origin and the functions and purposes for which the aid was allocated. Also, in looking at various issues - administrative as well as political - involved in the external aid process, it was possible to gauge how implementation had progressed and to focus on a central concern: the effectiveness of aid through its contribution to educational development. In identifying what had been done right and what constraints there were to the aid process, it was hoped that system-environment relationships could be better optimized. Thus the systems approach was able to provide a framework for the researcher to view the development of the PNG education system and determine its relationship with external aid.

Development and Education

As the literature on development and education in developing countries reveals, the term *development* is widely used in educational research, and although it can be defined differently depending on one's economic, social or political perspective, it has come to imply improvement, reform, growth and change (Christenson and Robinson, 1980:7). But writers have chosen to describe it variously as "what has been and what is sought" (Hanson,1966:12), and "a movement towards a solution" (Method,1974:127). In the researchers' viewpoint, when applied to education it means educational improvement. This necessarily implies a change in the status quo which can be achieved by the introduction of various change strategies.

Western economists tend to interpret development in terms of economic production and measure it statistically by increases in a nation's GNP - "the economist's loftiest aggregate" (Coombs,1985:15). Many of the early features of economic development were formulated by Sir Arthur Lewis who espoused the idea that economic development could be achieved by strengthening industry with labour that had been re-directed from the agricultural sector. After World War II when large infusions of U.S. capital, technology and management practices transformed the wartorn economies of Europe and Japan, it was assumed that their economic growth theories and models could also be applied successfully to the developing world. For a considerable time, the educational development strategies which developed after World War II, accepted this concept of development. It called for a greatly increased supply of educated manpower and skills so that the modern sector could be rapidly expanded (Todaro,1982:95). However, in the case of developing countries these were in very short supply, so the most expedient solution was to import and rapidly expand the educational models from overseas.

One of the main proponents of this *human capital theory* was Shultz (1977:318) who argued in the 1960s that increased investment in education would be a major step forward towards increased economic growth. He had strong support from Harbison and Meyers (1964) who, after analyzing 75 countries in terms of four levels of development, concluded that proper human resources development was a key to modernization. Thus manpower needs soon became the most prominent *efficiency* criterion for investment in education (Smyth,1974:114). In an effort to modernize and "progress" as quickly as possible, newly independent countries increased educational expenditure from $9 billion in 1960 (in real terms, at 1976 prices) to a staggering $38 billion in 1976 (World Bank, 1980:46).

Education for Social Development

It was not until the 1970s that the grave consequences of such actions were realized. Despite the improved GNP and the spectacular expansion of education at all levels in many developing countries, the facts also revealed " a shockingly lopsided and inequitable pattern of both economic and educational development" (Coombs, 1985:16). The rich had got richer, and the poor had got poorer. The gap between urban-rural had widened considerably and this has been well documented in many case studies (e.g., see Bacchus,1980:265).

Although many studies in different countries could now show that growth had taken place, it was only in certain narrow urbanized sectors of society. There had been little or no spread of benefits to other sectors of society (i.e., the so-called *trickle-down effect* had not worked). Recognition of these dangerous realities thus prompted a more *moral* view of development in the Third World: to improve all the people's quality of life. It was now to be growth with equity. Seers (1969:3) in talking about the meaning of development said:

> The questions to ask about a country's development are therefore: What has been happening to poverty ? What has been happening to unemployment ? What has been happening to inequality ? If all of these have declined from high levels, then beyond doubt this has been a period of development for the country concerned. If one or two of these central problems have been growing worse, especially if all three have, it would be strange to call the result 'development' even if per capita has doubled.

Today development is more likely to be seen as planned or directed social change that leads to social transformation in the direction of the provision of "social goods such as education, health services, housing, participation in political decision making and other dimensions of people's life chances" (Christenson and Robinson, 1980:7). This wider view of the meaning of development has led policy makers to evaluate education not only by its contribution to growth but also by its effects on poverty, unemployment and income distribution. With increasing populations and a strong and growing demands for more education, educational policy makers in many developing countries have attempted to provide a more equitable expansion of their educational systems and by providing greater relevance in their curricular.

Development and the Educational Dilemma

Many of the critics of human capital theory and schooling in general set about defining what they believed educational priorities should be and how these related to development. Illich (1973:62) said that the kind of education offered was often inappropriate and irrelevant, that it existed merely to maintain a hierarchial and authoritarian structure. In a somewhat similar vein, Bowles and Gintis (1976) and Martin Carnoy (1974) argue that schooling only serves to reproduce the capitalist means of production. Bowles and Gintis (1976:131) say that the education system is structured in such a way as to fit the needs of industry in that it exists only to supply educated manpower. In so doing, they suggest that it assists the elite classes in maintaining control over the means of production. Carnoy (1974:80) suggests that, in the Third World, the educational system is a direct outgrowth of capitalist expansion which seeks to make indigenous people subservient to their colonial masters. He maintains this exploitation by colonialists has been continued by local bourgeoisie after independence so that today's education system (which emerged out of colonialism) continues to reinforce the capitalist mode of production whilst performing a domesticating influence. Another critic and theorist, Paulo Freire (1973), a Brazilian, sees education as being used for elite domination. But he also believes in the value of education in that it can help man become liberated. He suggests that through literacy programmes the masses will be able to better understand their standing and work towards improving their position.

Reform and the Call for a New Economic Order

Thus, many of these scholars are in agreement that education is an essential, though by no means the sole, precondition for development. They are unanimous in their stance that education needs reforming and that in its current form can be an impediment to development, however, there does not appear to be any agreement on how best to achieve this reform. As Zachariah (1985:19) notes, for these theorists a serious and practical problem was to "demonstrate that a viable, alternative form of education" had been successfully tried out elsewhere. Most suggestions have tended to concentrate on alternative systems (e.g., non-formal education) rather than changing the formal system too much. These range from trying to improve rural production in the informal sector, to meeting the needs of disadvantaged groups (e.g.,women), to assessing what combination of inputs are needed to improve learning outcomes. In contrast to these is a more radical group who assert that a more fundamental re-thinking of the relationship between development and education is required. They represent the demands and desire for a new *international economic order* on education. In simple terms, Tilak (1982:107) says the new order envisages real change, implying specifically an elimination of inequalities between nations and within the nations in every sphere: economic, political, social and cultural. This group of theorists maintains that education should therefore be an integral factor in promoting this new order. Bacchus (1981), for example, suggests that reform of curricula has been tried and has failed. He asserts that educational reform will not be realized until 1) the massive gap between the modern and traditional sectors of society is reduced, and 2) a new development strategy is created. Such a strategy, he says, would be based upon self-sufficiency through self-help; in this regard, the government would need to promote and encourage economic activities through investment in the informal sector. In addition, he maintains that human resource *utilization* is needed through labour intensive methods of production (1981:221).

Education and Rural Development

Others (Hanf et al., 1975:68) suggest that formal education impedes economic growth and promotes political instability. They maintain that there is an "economic overvaluation of education" in most Third World countries. Their contention is that, when substantial investments in education are not accompanied by complementary capital investments, education will not yield any profit and so these investments are denied other possibilities. Further, they say that unless manpower is trained in such a way as to be able to use the skills productively then the investment is likewise lost (1975:70). Their solution is a ruralized educational system. They acknowledge its lack of success in Tanzania, but point out the main reason was because it was limited mainly to curricular changes only. They suggest that it begin at primary level, that it include urban (through vocational schools) as well as rural children, and that enrollment age be increased to at least twelve years so children will be physically able to cope with this practice-oriented education (1975:86).

From the foregoing it can be seen that, in general, most scholars refer to educational development in terms of reform and change. It is seen generally as a determination to change the status quo, and the process by which this is brought about is through planning and implementation of new change strategies. Yet, as many writers have noted, it would be naive not to recognize that any efforts to reform the educational system to make it more effective, will be met by considerable resistance from "entrenched bureaucracies and persons or groups with vested interests" (Zachariah,1985:12).

This study focussed on the change goals which were sought, the strategies used to achieve these, and the effects of the changes achieved in the development of education in Papua New Guinea. It has required analysis of these planned changes both quantitatively - in terms of capital improvements, student enrollments and retention, increase in equipment and materials - and qualitatively - in terms of development of new curricular, improved supervisory or evaluation methods and improved planning techniques.

The Aid Relationship

The main issues emerging from the literature on external aid to education are: external aid seen from different perspectives; education and external aid; terms of aid and its contradictions; the role of external aid; trends in the volume of aid; the need for educational planning; determining priorities for aid funded projects; technical assistance as a form of aid; and the role of overseas fellowships.

External Aid as Seen from Different Perspectives

For the last thirty years, an important feature of development policy has been the "educational cooperation" in the form of aid from the more to the less developed countries of the world. There have been many reasons put forward to explain the need for cooperation; one of the most prominent is that forwarded by Phillips (1976:6) who says:

> . . . it is clear that there can be no equitable economic and social order in the world while the developing countries have large sections of their populations living in a state of mass illiteracy and educational poverty, and do not have the necessary educational infrastructure to make use of their potential of human skills.

This view would be categorized as the *humanitarian* perspective, but of course not all people see aid in these terms. McNeill (1981:10) suggests that "the nature of the aid process is to a large extent determined by the need of the donor to exercise leverage."

While some writers would agree with this, they (Mason,1964:4; Frank and Baird,1975:134; Parkinson,1976:10) would also suggest there are many additional reasons why donors may provide aid: as a contribution to protect their own national security, to strengthen their own economy (by gaining more raw products or a more favourable trade disposition from the recipient country), and improvement of national status and prestige in the eyes of the recipient country or international community.

In his study of the aid relationship between donors and recipients, Krassowski (1968:18), states that "aid giving is . . . almost exclusively guided by the principle of 'influence' and 'control'." He further maintains that the more actively a donor pursues efforts to influence and control aid use, the more difficult it becomes "to separate aid funds as such, and intervention in recipient government policies in general" (1968:20). But it would seem that intervention of this nature is often subtle and passes unrecognized by the recipient or, perhaps worse, is ignored, in the belief that receipt of aid is more important even if only in the short term.

Thus, the topic of external aid can be, and is, a very contentious issue. This is because assistance, in whatever form, is often said to be merely another method of exploitation and dominance by the richer developed nations, through their bilateral or multilateral programmes, over the Third World . Although debating this issue is not the purpose of this study, it does, however, provide valuable insight and a more balanced view into better understanding the aid relationship.

External Aid and Education

The vast literature on external aid and education can be categorized by three different viewpoints. The first viewpoint is positive in that it sees the countries of the industrialized world supplying the missing resources (capital and expertise) which are needed by the Third World to develop their education systems. Developing countries deem this aid to be beneficial because it assists their nations in achieving development and propels them towards their ultimate goal of industrialization. Critics such as Hurst (1983,431) ask whether "modern schooling is a precondition of industrialization or an outcome of it".

A second viewpoint on external aid to education sees it as harmful to the interests of the majority of the populations of the developing world. Dependency theorists espousing this view (see Hayter, 1971; Jose, 1982; and Sobhan, 1982) maintain that external aid is an alliance between local capital interests and external transnational interests intent on subjugating the local developing economies to the production of primary products which are then sold to the rich countries at unequal terms of trade. Education's role in this is to supply a small amount of educated manpower to the capitalist-owned modern sector. These writers maintain that educational policies and schooling has had little effect on the distribution of wealth, power and control. Rather, they maintain, the educational systems in developing countries continue to serve a subordinate relationship to the narrow interests of an elite. They are of the opinion that aid to education under such conditions only helps to indoctrinate people into a particular world view (i.e., capitalist). Yet Hurst (1983:431) counters that this viewpoint really becomes a question of ideology preference, and that is no grounds "to suppose that education would serve a different purpose or play a different role in a socialist or any other kind of economy." Hurst also comments that the most recent development in theories of economic and cultural dependency

> has been the awareness that societies that try to isolate themselves from the international systems of trade and information in order to reduce dependency come to regret it, and that in some limited circumstances certain societies find it possible to develop in conditions of dependency, sometimes quite rapidly. (1983:432)

A third, and more recent, but less discussed, viewpoint argues whether aid is really as significant in its impact today as it was, say, a decade ago. Today, Third World countries are no longer blindly following Western educational models, and are beginning to question the relevance of much of their formal school curriculum. Thus the efficacy of aid to education is being more commonly challenged than ever before. The impact of foreign experts on educational systems is said to be reduced because they do not belong to or are ignorant of the needs of local culture and context, or because the local system has difficulty in deploying them. The same criticism is levelled at the provision of training opportunities overseas. In a discussion on the provision of external aid to education, Zachariah (1970:118) wonders, whether in view of the fact that it usually represents only a comparatively small proportion of education expenditure, "donor countries should expect their educational aid to give them the right to a controlling voice concerning the recipient country's educational system ?" Obviously recipient countries need to be more selective about the aid they accept in terms of its relevance to their problems as well as the price which has to be paid in terms of control and dependence.

Terms of Aid and Its Contradictions

Few, if any questions on the topic of external aid have been the subject of more scholarly analysis and debate than that of the terms of aid. Since much of the aid to the Third World comes in the form of loans, one of the oft overlooked problems associated with continued acceptance of aid is the difficulty of repayments says Mikesell (1968:265)

> economists have constructed models of externally financed growth in which annual debt service on hard or medium term rises to more than ten times the initial annual capital inflow. . . in some models, interest payments alone increase at a rate exceeding the rate of growth in G.N.P.

In light of this experience it is little wonder that developing countries today seek aid on concessionary terms (as against commercial loans) from whatever source is available. Yet most writers warn of the danger of accepting external aid simply because of its availability. The Papua New Guinea Government's *Manual on Aid Administration* (1980:2.7) lists reasons why developing countries have expressed disappointment with the terms of aid by donors:

> 1. donors mostly insist that the goods and services be bought only from the donor's country or restricted sources - compared to open market competitive prices.
> 2. donor countries have insisted on repayment in foreign exchange.
> 3. the selection of projects and the method of implementation have not always been according to the priorities and preferences of the recipients.
> 4. the amount of aid provided to different countries has not been according to their respective needs or respective development performance: it has been guided by narrow political considerations rather than socioeconomic considerations.

When aid is provided under such rigid conditions, it is easy to understand why many recipient countries have been dissatisfied and may have only benefited by half the value given. Specifically, with regard to aid for education, it must be noted that 'tied' aid comes in the form of technical assistance and is usually from a bilateral source.

Understanding the Role of External Aid

What, then, of the process of aid ? Unfortunately one of the important difficulties is that the processes and interrelations of aid which bring about development is not understood well enough to provide guidance for action. For example, there is a need to understand the underlying assumptions and philosophy behind the giving of aid *per se*. There appears to be much contradiction; as McNeill (1981:49) points out :

> Official statements of why countries give aid are often confusing and contradictory. Thus, while governments assert that concern for the Third World is a major consideration, they also stress the importance of supporting friendly nations, of

> saving countries from communism (or capitalism),
> encouraging the spread of a free market (or socialist) ideology,
> protecting raw material sources, stimulating exports etc.

The problem for developing countries, it would appear, lies not so much with the confused stated policies or motives of governments (or lending agencies) but rather with the extent to which these policies cause confusion for the administrators of aid who are required to put them into practice. Sachs (1971:25) , Goulet (1971:171) and Mikesell (1968:159) all agree with this viewpoint, contending that the role of aid is not sufficiently communicated to those involved in the administrative process, and further, all argue that aid should play a complementary role rather than a central role to the local effort, as well as encouraging self help measures. Until there is agreement on what the role of external aid should be by the participants, it is difficult see effective allocation and utilization of this important resource.

Trends in the Volume of Aid to Education

In the late 1950s and 1960s, more than 70 countries (particularly in Africa) became independent. Education seemed to be their hope for the future and it was, accordingly, given top priority by these countries as well as by the external aid agencies. Thus aid for educational development steadily increased, and up to the 1970s the assistance given to the education sector topped all other development sectors in the total assistance given (Coombs,1985:289). The bulk of this aid was for the formal sector (secondary and higher education) and was mainly in the form of technical assistance - although some capital assistance was provided.

Coombs (1985:295) has identified three trends, from the early 1970s to the present,which account for the volume of educational aid in this period:

1. Decrease in priority for education - meaning although education continued to receive substantial support, increased attention was paid to competing needs.
2. The education sector received a reduced share of total official development assistance.
3. Aid for non-formal education (outside of the education sector) increased substantially.

The largest source of educational aid in the world is the bilateral flow from government to government, which in 1975 accounted for approximately 65% of the $2,765 million total, given mainly to developing countries. The next largest source is multilateral aid, which constituted in 1975 about 21% of the total, and consists of loans and credits from the World Bank Group and other development banks. The remaining aid, about 14%, comes from nongovernmental organizations and various non profitmaking and philanthropic foundations (World Bank,1980).

The Importance of Educational Planning

But examining the volume and sources of aid is not by itself sufficient - although it is recognized that concerning the future of educational aid, it is important to speculate what is likely to happen to the overall amount available - what is of particular importance to this study is **how this external aid to education,** whatever its amount, **can be put to the most effective use. And how can the aid process itself be improved to the satisfaction of all concerned ?**

As Coombs (1985:307) has pointed out "external assistance...will never be more than a small fraction of the total education expenditures of developing countries." Thus, for the recipient country, it would seem that one of the problems for the decision makers is to be able to identify those priority needs which the country is least able to provide by itself, and which will make the maximum contribution to strengthening and developing the educational system. In agreement with this are both Phillips (1973:59) and Amuzegar (1966:76); the latter stating "an organized system of deliberate growth requires planned priorities, a rational choice among competing, and often mutually exclusive, development projects."

This perhaps illustrates the necessity for educational planning in developing countries. For, if state budgets and resources were unlimited, one could provide as much education and of the kind that every student and family wanted. However, when resources are limited, as is the case in developing countries, then priorities have to be set according to some objectives. Psacharopoulos (1985:13) suggests that perhaps the most pragmatic reason on why educational planning is needed is to be able to have some plan to show on how best to spend public resources on education. He defines planning as "the examination of many feasible alternatives and making a choice among them according to an objective" (1985:13). Therefore, in terms of educational planners, he suggests they should choose activities which are feasible, but which leave the final choice to the politicians. It is maintained that the role of the educational planner is to provide options and document the extent of the trade-offs involved. But as Williams (1976:35) notes "designing politically feasible alternatives and preparing technical solutions which avoid political tensions are formidable challenges for educational planners."

Tilak (1982:116) argues further, that the interrelation between political factors and the formation of educational policy interferes with the educational planning process and often results in a misallocation of resources in the educational sector. Blaug (1970:129) agrees

> the total expenditure on education is determined by a political process that is only vaguely connected with any of the objectives we have described as economic and non-economic; the size of the educational budget seems to be

> largely the outcome of an attempt to maximize electoral support

Despite this, the record shows in most countries that educational objectives have changed little over the years, *efficiency* and *equity* continue to be the major socioeconomic goals of planning. Yet while there are clear gains to be made from educational planning, particularly from the developing country point of view, the question may well be asked, "how does this fit with educational aid priorities ?"

Determining of Educational Priorities for Externally Funded Projects

The point to be made here is that national educational priorities flow from the national development plan, thus aid for education should be *consistent with* rather than follow the educational plan. What seems to be needed is a set of criteria which will assist in analyzing the contribution external aid has made to local development efforts. In this regard, Phillips (1973:61) suggests that for planners of educational aid the following criteria be employed in the selection of externally funded projects:

> . . . that it be requested by the recipient country, and that it meet a defined area which cannot be met domestically, quantitatively or qualitatively; that it be consistent with the national development plan; that there be a commitment to development policies; that it be carefully related to the country's resources as well as to its needs; that new institutions or methods introduced be abled to be maintained after the aid terminates; that it be sizeable and not peter out; it should take care not only of the direct needs but of those created by the repercussions of the direct aid.

Technical Assistance as a Form of Aid

Another extremely important dimension of the educational aid process which the literature identified is the supply of aid in the form of technical assistance. This is particularly so when it is realized that 60-70% of all external aid to education comes in this form (Coombs,1968:150). Many developing countries have a serious shortage of skilled manpower and depend on external aid to fill this gap. The foreign "experts" recruited or supplied are often involved at the highest levels of the decision-making process of the recipient country. Thus, they are sometimes in positions of power where they are able to exert considerable influence and control over decisions in the planning of educational development and the identification and preparation of aid requests. Goulet (1971:171) suggests that the transfer of technology, knowledge and skills for the purpose of development, "is not merely a technique, but a value-laden political act". But even in more general terms, where the expert only carries out an operational function, Phillips (1973:50) contends it can also be a difficult situation. He says that failure to take into consideration the sociocultural situation may lead to aid projects having different results from those intended. This may suggest in the case of recipient countries the need to carefully analyze the role of foreign experts and the concomitant problem of external intervention which Zachariah (1970:117) prefers to call "cultural intervention" and others refer to as *dependency syndrome*.

The Role of Overseas Fellowships

In the past, one particular area of aid which has aroused much concern in the provision of technical assistance is the supply of overseas fellowships for further training by the recipient country. This was because of the donor's insistence that scholarships be tied to the donor's country. Although some donors no longer rigidly insist on this condition, it is now the students in the recipient country who are keen to pursue the obtaining of foreign certificates. The problem here, as McNeill (1981:96) indirectly points out, is that it reduces the building of local institutional capacity in preference for individual capacity, and runs the risk of irrelevance.

In view of the issues raised in the literature with respect to problems inherent with external aid and, keeping in mind that developing countries will continue to seek external aid for education in the foreseeable future, this study seeks to explore the aid relationship and its processes as they pertain to education. In so doing, it is hoped that a more balanced and effective relationship will ensue by identifying weaknesses and deficiencies in the process and by suggesting ways of improvement.

Conceptual Framework

This study emphasizes both the qualitative and the quantitative aspects of external aid to the development of the P.N.G. educational system. Of particular importance to the study are the needs identified by the Department of Education and the planned activities arising from these that were considered necessary to meet the Department's educational policy objectives. This type of approach is supported by Husen (1984:22)

> . . .to obtain a basis for policy action. In order to take appropriate action, one needs to know what factors are accounting for the outcomes and to what extent the resources that have gone into the system have contributed to achieving the goals set and at what price.

Thus this study focussed on three main areas:

1. It examines the development (or change) of the country's educational system and the contribution external aid made during the period 1975-1985. In this respect, analysis focuses on aspects within the educational system which have undergone reform; i.e., structure and organization, planning and administration, curriculum, supervision and evaluation.
2. The study also examines external aid as a resource input into the P.N.G. educational system. In order to achieve this, Cerych's classification (1967:14) was used, which includes: a) the form in which it is supplied, b) its source of origin, c) the function and uses for which it is requested. In

addition, attention was given to those factors involved in the request and negotiation of the aid process as well as the administrative problems and procedures involved in the planning and implementation stages.

3. The assessment of opinions of interviewees on the contribution of external aid to the development of the education process is recognized by the researcher as being more difficult. It is important, here, to remember that this study was intended to describe instead of prescribe, to examine rather than evaluate, to judge but not to censure.

To this end, the criteria proposed and used by Amuzegar (1966:34), and slightly modified by Peters (1976:37) to suit his study, were used. Basically, the criteria fall into four general areas: consistency, receptivity, transferability and assimilation. They are

* clarity and consistency of educational objectives
* facility in the procedures for requesting, negotiating and receiving educational assistance
* adequacy of loans and grants to meet local resource needs
* flexibility of conditions attached to loans and grants
* suitability of skills and functions of external personnel
* novelty or innovativeness of problems diagnosed and solutions recommended by external experts
* appropriateness of training assistance programmes sponsored at home and abroad

Following Amuzegar's (1966:35) lead, these criteria will also be used to formulate the interview schedule.

Summary

The conceptual framework for this study is based on a "systems" perspective. In the study this concept views the external aid received as *inputs* to the PNG education system, and the development (or changes) which occurred as a result of the aid as *outputs* of the system. These outputs were identified and described, and then assessed in terms of the criteria selected. Based on this assessment, conclusions were reached as to the overall contribution of external aid to the development of the PNG education system during the period in question.

CHAPTER IV

PNG AID POLICIES AND AID STRATEGIES

In a sense the starting point to understanding Papua New Guinea's aid policy and aid relationships demands some familiarization with the workings of the nation's economy and its development strategies. This is because the mosaic of what is the nation's public expenditure planning system and how it fits together is complex and needs some explanation. In addition, the need for the government to contain public spending and maintain control over Papua New Guinea decision making have strongly influenced the formulation of its aid policies and development strategies.

Macro-Economic Review

In the decade preceding self-government in 1973, the Australian Government policy of gradualism and uniform development in PNG came under severe criticism abroad, particularly from the United Nations. Despite this, the Australian Government continued to advocate political reform, at a pace suitable to "territorians", necessary to prepare the Territory for self government and later independence (Hasluck, 1976:398-399). In addition to this political activity, attempts were being made to strengthen and diversify the economy and expand social services, particularly education. By 1970 the Australian grant to PNG had risen to AUD$80 million (approx.two-thirds of total government revenue) from about AUD$20 million in 1964.

But despite the diversification of commercial activities achieved in earlier years, it was all too evident that the economy was still very much a slave to world commodity markets and, not being a major producer of any of these commodities, had no influence on world price levels. In 1972, prices for the country's main export commodities (e.g., copra, cocoa, coffee, and copper) had fallen a drastic 20% from their 1968 levels. In characterizing the economy of this period, mention must be made of foreign ownership. Apart from the mineral sector which was by far the biggest, there was also substantial foreign ownership in export crop production. Thus on the eve of self government, the three major sources of influence of the country's monetary economy - foreign trade, foreign aid, and foreign private investment - were large relative to total domestic resources (Allan and Hinchliffe, 1982:9). In addition, the country had not yet put in place the necessary instruments and institutions to manage the economy (Goodman et al, 1985:25).

The first world oil crisis of 1974 (which led to the world recession of 1974/75) and the consequent price rises of other imports were a severe shock to the new nation's economy. Import prices rose by 14%, while export prices increased by only 3%. But the country was able to absorb this blow because of the comfortable international reserves position at the beginning of 1974 and the high levels of mineral exports. Unfortunately, the country's external accounts had deteriorated because of worsening terms of trade and slow export growth. Increases in domestic wages further compounded the situation. In an effort to stabilize the economy the Government increased taxes and interest rates and scaled down investment in development. In addition, they set up domestic stabilization funds for each major commodity in order to reduce fluctuations in incomes of producers and to reduce fluctuations in internal revenue. Also price controls and monitoring policies were introduced to keep a check on inflation and ensure profit margins were kept at reasonable levels. So that for this period, although real economic growth had declined, the Government was successful in curbing the current account deficit.

But by 1976 the economy had rebounded, thanks to increases in coffee and other agricultural commodity prices, thus positively affecting rural incomes and government revenue. At the same time, the Minimum Wages Board imposed a twelve month freeze on urban wages, and a new five-year aid agreement was concluded with Australia. The GDP was up by about 1% in 1977 compared to -3.3% in 1976, and the current account balance was now in surplus.

But most observers agreed that the new nation would need to chart a solicitous course in the future if it were to survive the rough waters ahead. The consensus was that this could be best done through the formulation of sound development strategies.

The National Development Strategy

In 1972, the World Bank and the United Nations Development Programme co-sponsored a team from the University of East Anglia to suggest development strategies for the country. Their recommendations, known as the Faber Report, supported "economic nationalism with a more equal distribution of benefits both between foreigners and Papua New Guineans and between Papua New Guineans themselves" (Allan and Hinchliffe, 1982:18). The Report's proposals were used by Chief Minister Somare and his first government to produce a number of economic and social objectives which became known as the *Eight National Aims* (see Appendix A). But as important as these were at the time, they were considered no more than a statement of intent by the government. Even the Chief Minister said "the problem of the Eight Aims was to ensure their implementation" (Somare, 1975:110). With independence looming, what was needed were some operational guidelines that could be used to assist decision making with respect to planning the economy.

The *Post Independent National Development Strategy* (1976) was produced and although it was judged to be far from perfect, it was nevertheless ". . .the clearest statement of objectives yet prepared" and it ". . .argued a rationale for increases in resources to be channelled to rural areas in general and disadvantaged areas in particular" (Allan and Hinchliffe, 1982:25). Consistent with the Eight Aims, this strategy stressed two major thrusts of economic policy : (i) Rural development and particularly development of the less developed areas of the country. This was thought to be desirable in so far as it would help redistribute the benefits of development to the vast majority who lived rurally, and it would help absorb the growing labour force. (ii) Development of the nation's rich natural resources to provide a base for eventual economic self reliance. Major natural resource development would require overseas capital and expertise. The Government was to have encouraged such development while at the same time ensuring that its impact was of net benefit to the country (UNESCO, 1979:5).

But as Bacchus (1987:54) notes "there were marked inconsistencies between stated policies and the development programmes which were being implemented". Despite its stated intention of improving rural welfare, in reality the focus for its development strategy was instead concentrated mostly in the formal sector with emphasis on increasing exports and encouraging import-substitution industrialization. Bacchus identifies the effects resulting from this trend as: increasing employment opportunities and wages in the urban areas to the detriment of the rural areas, an expansion in the size of the public service, and the creation of a local elites who were only too keen to retain the 'status quo' and retain their priviledged position in society.

The Development Strategy and Education

Pursuit of the Government's development strategy created a demand for better trained manpower to fill the increased job opportunities which became available in both the public and private sectors. Since these employment opportunities were relatively well paid compared to a rural wage, and almost always located in an urban centre, the attraction to young school leavers was obvious. Thus the public demand for increased education - particularly at the secondary and tertiary levels - became strong and vocal and resulted in further expansion of these levels. But today, because of an increasing population and a reduction of job opportunities, and a rise in the number of school leavers there is cause for concern. The demand by the public for increased access to higher levels of education is fuelled by the competition for the few jobs available. Bacchus comments

> This is a well-known phenomenon especially in developing countries where, as unemployment increases, existing certificates are devalued and pressure builds up for expansion of yet higher level educational opportunities. (1987:60)

The fact that the nation required better educated manpower on the one hand, and the formal sector was unable to provide employment for all school leavers was a dilemma for educational decision makers. It resulted in a dual system of education whereby an attempt was made to maintain adequate standards, but the curriculum was to prepare students to fit back into their village societies. The educational developments planned by the Department of Education to achieve these objectives is treated in a later section.

But one importance consequence of the Government's development strategy was in the process of its implementation. To aid this process "strategic objectives" (see Appendix B) were formulated and used as an explicit set of criteria to reallocate government expenditure. This new approach to public expenditure planning was called the *National Public Expenditure Plan* (NPEP) and it began in 1978.

National Public Expenditure Plan

The NPEP was a tool for ensuring that limited resources available to the government (both internal and external resources) were directed only to highest priority activities. It adopted the "rolling plan" concept in that although it is reviewed annually, its plans contained forecasts for four years ahead. For 1978, and subsequent years, departmental recurrent expenditures were held at their 1976/77 levels in real terms. The increment in spending made possible by the growth of government resources in 1978 was then allocated competitively to departments for new project proposals. As Conroy (1980: 6) advised project proposals were then evaluated in terms of their contribution to the strategic objectives and to their likely effectiveness.

The evaluation of these projects was an integrated process. General coordination and advice at the bureaucratic level was carried out by the Budgets Priority Committee (chaired by the Secretary for Finance and Planning) which made recommendations to the National Planning Committee (a committee of senior ministers, and chaired by the Prime Minister). This latter committee provided the essential political authority to review all of the government's expenditure decisions in relation to its stated objectives. For final approval, the NPC made recommendations (in the form of a short-list of projects, called the "Standing Design List", SDL) to Cabinet. It was the Cabinet which decided, from the SDL, which projects would be funded by the budget.

To ensure that external aid was channelled through the budget process, the SDL was readily made available to prospective donors so that they could choose projects which interested them. In the event that a project which was likely to receive aid funding was not included on SDL, the government rejected the aid and requested that it be re-presented for consideration the following year.

In 1978, after reviewing forecasts of revenue from all sources, it was determined that the country could sustain a medium term level of expenditure growth, and so 3% (in real terms) annual growth was used at the commencement. Several years later it seemed that this rate could possibly be increased to 5%, but by 1982, as a result of changes in world commodity prices and the prospect of reduced Australian aid and their consequent impact on government revenues, the level was reduced even below the initial 3%.

As some writers have noted, Allan and Hinchliffe (1982: 27); and Conroy (1980: 6), the procedures of the NPEP were important to government organization and coordination because they required the active participation of politicians in making explicit trade-offs between competing aims. It also ensured a degree of discipline on all new expenditures and it clearly demonstrated the intention of achieving coordinated bureaucratic responses to political forces. However, despite its achievements and the obvious improved planning framework and fiscal discipline that it afforded the government between 1978-1985, the NPEP did have weaknesses.

But by 1980, the effects of the second major oil price increase was being felt on PNG's international terms of trade. The world recession, which began in 1980 and ended in 1982, resulted in both lower export prices and volumes for the country, while at the same time import volumes and prices increased considerably. In addition, production of copper at Bougainville began to decline and there was a growing realization that expectations from the Ok Tedi mine would have to be put on hold. The nation's balance of payments which had been consistently positive during 1976-79, became consistently negative during 1980-84. The net result meant a substantially reduced GDP growth rate (from about 2% in 1979 to -2.3% in 1980), and a return to a deficit for the current account balance. (See Table 1).

Underlying all of this has been the country's continued reliance on external finance as the external public debt rose from K270 million in 1979 to K820 million by the end of 1985 which was equivalent to 37% of GNP. Because much of this new debt was undertaken in a period of high interest rates, the servicing of external debt shot up from 4% of export earnings to almost 10% in 1985

Table 1

PNG'S RATE OF REAL GDP GROWTH 1973 - 1984

Year	Growth Rate	Year	Growth Rate
1973	6.60%	1979	2.00%
1974	2.60%	1980	-2.30%
1975	-1.00%	1981	2.20%
1976	-3.30%	1982	0.90%
1977	1.00%	1983	0.40%
1978	3.00%	1984	2.20%

Source: PNG Department of Finance and Planning

It is not the purpose of this study to detail the shortcomings of the N.P.E.P., nor to suggest that the N.P.E.P. was the cause of this situation, but suffice it to say that by 1982, with the government facing increased spending, declining revenues, increased commercial borrowing, growing unemployment and increased crime, clearly revision was necessary.

The Medium Term Development Plan

The incoming Somare government in 1982 clearly felt that the development strategy which they had initiated at independence in 1976 was no longer appropriate. This situation was a major concern for the government and its critics. Both the World Bank and the Jackson Report openly expressed their dismay at the state of PNG's economy, and freely offered their advice:

> The major task following self government in 1973 and independence in 1975 has been the establishment of a set of policies for managing the economy and maintaining economic stability and a set of objectives for allocating public expenditures so as to promote the development of the country in a way that benefits all citizens. Economic management has been sound . . .However, growth, has not been strong during the period . . .During the 1980s, the Government's aim will be to promote more rapid growth on the basis of the framework for a stabilization now in place. (World Bank, 1982:3)

> Papua New Guinea's growth since independence has been somewhat disappointing. Cohesion and stability have been achieved, but growth, particularly in the subsistence and other agricultural sectors, has been limited.
> . . . it is now time for more debate on options that Papua New guinea faces (Jackson Report, 1984:7)

The Wingti Government's solution, announced in May 1984, was the preparation of the *Medium Term Development Strategy* (MTDS) and this resulted in a five year plan called *Medium Term Development Plan*. With the main goal being to increase fiscal self reliance, the new strategy was to increase emphasis on economic growth and revenue generation.[2] The Plan, introduced in 1986, has sought to reorientate the NPEP/MTDS to more long term and sectorally-based planning. It has abolished red tape (to stimulate foreign investment) and cut out government functions where it was felt the private sector could do the job better. But without question the main thrust of the Plan, and arguably its most controversial aspect, was the re-direction of spending towards revenue making activities. Major growth sectors like agriculture and industry were targeted to receive the lion's share of future budget allocations. On the other hand, education, having been lumped into the social services sector, had to face budgetary constraints "that will allow, at best, only a very small increase in the real resources devoted to this sector over the next five years" (Papua New Guinea, 1987:121).

One of the acknowledged strengths of Papua New Guinea's NPEP/MTDS is that it required all foreign aid to be processed as part of the Budget. How the aid policy works and its relationship to both the NPEP and Australia is important and requires explanation.

PAPUA NEW GUINEA'S AID POLICY

Papua New Guinea's aid policies evolved slowly over a period (1972-76), and in the early years because of its special relationship with Australia, policies became very much influenced by the relationship because of this closeness.

Since the country's dependence on external aid was already extremely high - mainly through the Australian unconditional grant - the newly independent government rejected the idea of accumulating revenue through as many external sources as possible. Clearly the rationale behind this was an attempt to avoid the aid problems that had plagued many other developing countries a decade before it. i.e., the aid is frequently tied to donor country procurement, almost always tied to specific projects and usually builds up recurrent cost commitments which the recipient country then has to meet out of its recurrent budget. By channeling all of its aid[3] through the NPEP, it was envisaged that it could both maximize the use of this assistance by supporting high priority activities and ensure that the real control over the direction of aid funded expenditure remained within the country. In support of these objectives, Markis and Dahanayake (1985:8) identified five central policies which have been the basis of the country's aid policies. Specifically, these are:

---

[2] during the decade 1972-83, the annual average growth of GDP was only 0.8%, and when this is compared to the annual population growth for the same period, it indicates a negative rate of per capita income (Makis and Dahanayake, 1985:24)

1. All overseas aid must pass through the government budget.

   - aid funds, from whatever source, are treated as revenue. All aid funded projects were included in the budget as expenditures. In this way, it was the government that exercised control over spending.

2. Foreign aid is only a matter for the National Government

   - to ensure fiscal responsibility and accountability, and that the aid supports national development priorities, only the national government entered into aid agreements.

3. Untied grant aid will be given first preference

   - grant aid allowed the government the freedom to allocate resources as it chose within the budget.

4. Procurement-tied aid may be accepted, but only where the donor agrees to open competitive bidding.

   - to ensure that maximum benefits from the aid are received by PNG, procurement was to come from the best value sources (after taking into account -

---

[3] with the eception of *Medium Term Grant* (those projetcs costing less than K250,000)

price, quality, durability, maintenance, etc.), and this was done through open tendering.[4]

5. The concessionality of overseas aid should pass only to the Government, and not to commercial bodies or statutory authorities.

    - where aid funds were used to finance projects belonging to commercial entities (e.g., statutory authorities) the policy was to on-lend the aid to these commercial concerns at approximately market rates, but with some degree of concession as an inducement.

Over the years, there has been considerable debate over the advisability of PNG having such restrictive aid policies. Some politicians, for example, have branded it as a hindrance to attracting greater quantities of aid, while others have publicly denounced the aid strategy suggesting that PNG should rather be seeking a preference for project-tied aid.[5] As one would expect, most donor countries have taken the stance that a more relaxed PNG aid policy would allow for more aid funded projects. The PNG Government, however, has been loathe to make any changes to a system that has provided it with a good deal of flexibility in deploying its aid resources to where it wants them, and insulating them from the special interest of the donors.

From the donors viewpoint, perhaps the biggest stumbling block to increased aid is the reluctance of PNG to accept procurement-tied aid. Yet inspite of its resolve not to revise its aid policies, in the review of the budget process in 1985 (and the subsequent introduction of the Medium Term Development Strategy) a certain degree of relaxation was allowed when it was determined that where procurement-tied aid is provided in the form of a grant, the requirement for international tendering would no longer be required.

---

[4] where this could be a problem, the donor is asked to agree to support a number of NPEP projetcs, under the expectation that firms from that donor country would win contracts at least in one or some of them to enable draw down of the "tied aid" in full within a reasonable time (PNG Aid Manual,1980:4.9)

[5] as Makis and Dahanayake (1985:11) suggest this may be more out of frustration of not being able to get their pet projects funded.

But the impact of this revision was minimal and did not go far enough according to Makis and Dahanayake (1985:12), who make the point that even where tied-procurement causes over pricing by as much as, say, 25%, the grant element will only be reduced by this much. So, although the full benefits may not be attained, they maintain that so as long as PNG ensures that in any aid agreement the net grant element is at least above 50% [6], then PNG would still be better off accepting the aid rather than rejecting it.

As stated earlier, to a very large extent the nation's aid policies have been influenced by the relationship between PNG and Australia. In formulating its aid policies more than a decade ago, PNG was very cognizant of the fact that Australia was, by far, its biggest aid donor and it was not about to jeopardize this special relationship. But to understand why and how this special aid relationship developed requires a brief historical explanation of Australian colonial development policies for the territories.

A Brief Historical Note

Although European exploration around the island of New Guinea was as early as the seventeenth century in the form of various commercial trading companies[7], it was not until fairly recently that colonization began in ernest. During the scramble for colonies in the South Pacific in 1880s, Holland annexed the whole western portion of the island.[8] In 1884 the south-eastern portion - later to become known as *Papua* - was claimed by the British and annexation followed four years later. German interest in the north-eastern portion - later to be known simply as *New Guinea* - had been established several years before this, but formal annexation did not take place until 1885.

---

[6] the OECD criterion

[7] e.g.,Dutch East India Company, British East India Company, Hamburg based Godeffroy und Sohn.

[8] today, this is known as *Irian Jaya*, and is deemed an integral part of Indonesia.

But Britain, being more than 12 000 km away, showed little or no exploitative interest in its latest acquisition. Indeed Britain's only interest in the annexation appeared to be to provide a bulwark against any further German expansion in the area. But as Amarshi et al (1979: 8) point out, the Australians as merchant traders in the region were interested in its commercial potential, and in 1906, formal control for Papua was transferred to Australia [9]. Control of the German New Guinea portion was mandated to Australia (in 1920) by the League of Nations at the conclusion of World War 1. By the end of World War 2, Australia had concluded a Trusteeship Agreement with the United Nations (1946) and continued to administer New Guinea as in the past. Thus, while the Territory of Papua became an Australian "possession", the Trust Territory of New Guinea remained in the hands of the United Nations.

The Policy of Gradualism

Development in the two territories up to World War 2 can best be described as uneven. On the one hand, development in the Territory of New Guinea had benefiited considerably from German colonialism: i.e., German Government subsidies, the plantation system and an extensive trading network within its colonial empire. On the other hand, the Territory of Papua had to rely almost exclusively on gold production by private enterprise, and while the lack of success of its agricultural export production can be attributed to both poor soil and poor climate, it is also true that a lack of interest and provision of adequate resources by the Australian colonial power was also a contributing factor.[10]

Perhaps the first idea for gradual uniform development of the two Territories originated out of the philosophy of the Australian Labor Party, which assumed office in 1943 under the leadership of Prime Minister John Curtain. There was an inherent distrust of elitism in its political philosophy. When the Menzies' Liberal Government came to office in Australia in 1949, the Minister for Territories, Paul Hasluck [11] , was to continue to advocate the policy of gradualism, and suggested in 1956, that self-government for Papua New Guineans was still very much "in the distant future" (Amarshi et al, 1979:183). In addition to the Australian administration, this view was also shared by the many Christian missions who were operating in PNG and who, according to Smith (1985: 44)

---

[9] Australia had only just declared her own sovereignty from Britain.

[10] remembering that there was no demand in Australia for tropical raw materials at the time, and that Australia, as a newly independent country herself, continued to rely on Britain for essential capital, immigrant labour and markets (Amarshi, 1979:14).

> were suspicious of the secular policies of government and the exploitative tendencies of settlers, and favoured gradualism and uniform development, for they were apprehensive both of the effects of secular westernisation and of widening regional differences.

Thus up to the early 1960s, the official policy for the Territory's was aimed to produce an indigenous society where, as Smith (1985: 49) says, "there would be no elite and no disparity between 'advanced' and 'primitive' or rich and poor."

Without doubt one of the most important factors which influenced post-war Australian policy in the Territories was the requirement for Australia, under the terms of the Trusteeship with the United Nations, to report annually on its administration of New Guinea. In addition, every three years the United Nations appointed a fact finding mission to visit the country and report back. It was one of these missions, in 1962, under the chairmanship of Sir Hugh Foot, which criticized the slow progress in all facets (constitutional, political and educational) of development in the Territory. These criticisms were particularly forceful because they came at a time when many newly independent African nations were voicing their anti-colonial feelings in the United Nations. As a result of this mission, Australia was strongly urged to set a more realistic timetable for self government in the Territory. The Foot Report emphasised the crucial importance of expanding the education system [12], and denounced Hasluck's 1961 development plans as inadequate.

---

[11] appointed to this new portfolio in 1951.

With regard to economic development, the mission urged that the World Bank be invited to assess the economy and draw up a five year development plan. The World Bank's report (1964), although stressing a continuing role for European enterprise, also anticipated a more steady localisation of public administration and an increasing involvement of Papua New Guineans in the economy (Downs, 1980:273ff). The 1972 elections in Australia returned the Labor Party to power (1972-75), and it made efforts to divest Australia's image as "colonial exploiter" by immediately approving self government the following year, and urging the PNG government to set a target date for independence. The historical importance of Australia as a colonial power in PNG and its role in the early development of the two territories cannot be overemphasised. An appreciation of this historical perspective provides an understanding of why Papau New Guinea's aid policies evolved as they did.

THE AID RELATIONSHIP WITH AUSTRALIA

When one examines the nature and magnitude of Australian aid to PNG over the years, it is easy to understand why the two countries are said to have a "special" relationship. The terms on which PNG and Australia have negotiated Australian aid since independence have been described as " a model of liberality " (Conroy, 1980: 1). This is because, up until 1986, the aid transfers to PNG were in cash to support the budget, without restriction as to procurement as distinct from other industrialised donors, who stipulate that goods and services must be bought from their countries. Providing an untied cash grant of this nature has assisted PNG in providing a politically stable environment. Also, as an additional source of revenue, the grant has been easily incorporated into the budget and used to fund any aspect of the nation's development effort. Of course an extra attractive feature for PNG is, because of its grant nature, it does not have to be repaid.

---

[12] which prior to World War II had been left very much in the hands of the various Christian missions, so much so, that post-war educational development really meant the building of an educational system from the bottom up.

With the shift in Australia's policy towards PNG, and the subsequent granting of self government in 1973, the Australian Prime Minister, Gough Whitlam, announced a AUD$500 million five year aid commitment leading through independence, with the annual amounts to be negotiated by the two countries. Unfortunately, this was very short lived because within two months after PNG's independence and only one day before he and his government were terminated by the Australian Governor General, Whitlam announced a cut of 6% of the annual aid allocation to PNG. The major effect of this, from the PNG point of view, was the obvious realisation that dependency on Australia for a large proportion of its budget places it in a very vulnerable and precarious situation since aid agreements are always subject to the "health" of the donor economy.

The incoming Liberal Government in Australia, under the leadership of Prime Minister Malclom Fraser, concluded a more definite long term agreement in March 1976 in the form of the First Five-Year Aid Agreement 1976-1980. The AUD$930 million over a five year period (with annual top-ups of about AUD$10 million to provide for inflation) agreed between the two countries alleviated some of the uncertainty immediately after independence and, as Lepani (1983: 12) reports, "for a time provided some 'breathing space' for the PNG government and its budget in order to allow entry into serious consideration and preparation of the national expenditure plan" (the new N.P.E.P process). Unfortunately, the anxiety for PNG reappeared soon, because by the end of 1976, the value of the Australian dollar had fallen, and Australian inflation had soared. The result was a decline in Australian aid of about 5% in real terms.

But on the whole question of Australian aid to Papua New Guinea there was by no means unanimity. Some sectors of the Australian bureaucracy, for example, argued not only for a cut in the amount of aid to PNG, but also for a tying of the supplement to Australian selected projects. Conroy (1980) and Lepani (1983) identify the Australian High Commission in Port Moresby as one of the protagonists of this view. Others preferred to maintain the present level of aid if not out of a genuine interest to aid the PNG development effort, then certainly for trade or security reasons.

In 1979 the report of the Committee on Australia's Relations with the Third World (commonly referred to as the Harries Report) was released, and with respect to PNG, it recommended a reversal of policy for future aid to PNG. Apart from recommending the continuation of the trend of reducing the relative importance of PNG in the total Australian aid budget [13] , the report indicated the need for a shift from the current budgetary grant to more specific project aid and technical assistance which would have the effect of increasing Australia's identity with the aid provided (Conroy, 1980: 4). In the face of considerable anxiety and fear being expressed from PNG over the possible implications of accepting these recommendations, and with the second aid agreement looming very close, the Australian government appointed Sir John Crawford, in 1980, to examine the whole aid relationship with PNG.

The Second Five Year Aid Agreement 1981-1985 was, in many ways, a sequel to the Crawford report. In this agreement, aid was to continue as before (untied budget support) but would now decline by 5% annually in real terms. Provision was also made to allow for inflation in Australia up to a limit (full compensation up to 10%, half between 10-14%, and none above 14%). With respect to future aid to PNG, Makis and Dahanayake (1985: 15) state that the main recommendation of the Crawford report, that untied budget grants be continued with the provision of an annual 5% decline in real terms, was accepted. Another important recommendation accepted, and later to prove very beneficial to PNG, was a provision to review the proposed level of aid in the event that PNG's expected level of revenue from mineral resources should decline. Unfortunately, this scenario did eventuate, and by late 1981, PNG had considerably lower revenue from its mineral earnings. This required the PNG Government to adopt a tight fiscal strategy aimed at reducing public expenditure. Later, when further commercial borrowing proved unsuccessful, PNG was forced to request that the Australian Government review the aid levels. The request was granted, subject to a trigger mechanism [14], and reduction in the rates of decline of Australian aid was approved:

---

[13] the PNG aid allocations constituted about 36% of the total Australian aid programme in 1983/84.

1982	1%
1983	1%
1984	2%
1985	2%

The Jackson Report

With the effects of the recession still being felt in PNG, and calls in Australia for a move to "normalize" the aid relationship with PNG, the Australian Government formed yet another committe[15], headed by Sir Gordon Jackson, to review and "advise on the future directions and form of the Australian aid programme" (Commonwealth of Australia, 1984:4). The Committee's report was tabled in March 1984, and contained the following recommendations:

1. After the present aid agreement, budget support should decline by 5% per annum in real terms; and that as a move towards normalizing Australia's aid

---

[14] Makis and Dahanayake (1985:17) report that the trigger mechanism was to activate when PNG mineral revenue rose above K60m, K100m or K140m in any year - in which case, the rate of decline would rise to 2.5%, 3.75% or 5% respectively.

[15] Committee to Review the Australian Overseas Aid Programme.

relationship with PNG in the long term, additional bilateral aid to PNG be provided on the same basis as aid to other recipients of Australian aid so that the rate of decline in total Australian aid to PNG be 3% a year in real terms.

2. Australia should continue to provide PNG with generous levels of aid.
3. There should be no major immediate change in the level and form of Australia's aid to PNG.
4. Untied budget support should continue, but it should continue to decline gradually but predictably
5. Independent annual reviews of the PNG economy should be undertaken and should form the basis of continuing annual government consultations.
6. PNG may seek to form an aid consultative group with potential donor countries. Such a group will be useful in increasing the volume, diversifying the resources and improving the quality of aid.

For PNG, the most uncomfortable proposal, though not unexpected, was the plan to gradually reduce the untied budget grants and to begin a move in the direction of other forms of aid. It was understood that this type of aid may take the form of project aid, technical assistance, commodity aid, co-financing etc. But of course it was known that, as elsewhere, these forms of aid are usually tied and a large proportion of them are really only loans rather than grants. In addition, it was also noted that the bulk of Australian project aid, like most other donors, would probably only finance the off-shore (foreign exchange component) costs and therefore require matching funds by the government.

Facing these disturbing possibilities, but realizing the Committee's report had not yet been officially accepted by the Australian Government, the PNG Government began negotiations in 1985 on the Third Five Year Aid Agreement 1986-1990, requesting a much more favourable plan. Despite the PNG pleas for additional consideration - citing poor internal revenue prospects in the medium term, the financial constraints that limit its capacity to absorb project-tied aid, and the resource needs to operate development efforts under the new medium term development strategy - in the final analysis, the formula which emerged from the negotiations was, essentially, that which the Jackson Committee had recommended earlier. It included a reduction in untied budget grants of 5% per annum, and gradual increases in non-budget support such that total aid to PNG has reduced by 3% in real terms each year. See Table 2.

This new agreement reduces the untied budget grant from its present 99% of the total aid package to PNG to around 89% by 1990. The implications were, that the percentage of tied-aid for PNG would now rise correspondingly and as Australia attempts to "normalize" its aid relationship with PNG, the latter would have to, for the first time, accept a greater proportion of its aid allocation tied and on terms and conditions set by Australia. As with other recipients of Australian aid, this will mean:

(a) Procurement:

although untied in principle, since both Australian and New Zealand tenders receive a 20% discount it makes it almost impossible for others to be competitive. The situation also provides the potential for overpricing by 20%.

[illegible] Project Aid:

the selection of contractors would remain with Australia, with PNG retaining the right to veto any selection. In addition, nearly all local-component (on-shore) costs of any project would have to be met by PNG.

(c) Consultancies:

if financed from the tied-aid allocation, would come from Australia.

The current perception in PNG is, that while it is appreciative of Australian aid, past and present, the movement in this direction by the Australian Government has

Table 2

AUSTRALIAN AID TO PAPUA NEW GUINEA UNDER THE THIRD FIVE YEAR AID AGREEMENT

1986 - 1990

(A $ million)

Year	Budgetary Support	Non-Budgetary Support	Total
Base	302.799	03.946	306.745
1986	287.659	09.884	297.543
1987	273.276	15.340	288.616
1988	259.612	20.346	279.958
1989	246.632	24.927	271.559
1990	234.300	29.112	263.412

Source: Australian Information Service

Note: All budgetary figures are in 1985 prices

Base figures are as per 1985 aid allocations to PNG effectively reduced the grant element of its aid on the one hand and limited PNG's freedom to choose its own priorities on the other. It has, however, openly and publicly encouraged PNG to seek external aid from other sources. The issue of non-Australian aid, has always been of concern to PNG, as is clearly shown earlier by the country's development of special non-Australian aid policies which sought to protect this special relationship between the two countries. However, it is obvious that continued Australian untied budget grants to PNG will remain crucial to that country's development.

The precarious nature of bilateral aid agreements was shown when in 1986 Australia unilaterally cut AUD $10 million from PNG's aid support. Later in the same year the Australian Minister for Foreign Affairs, Bill Hayden, supported a proposal which provided a 2 year aid programme (instead of the agreed 5 year programme), with "guaranteed minimum" levels and negotiable additional amounts to a "maximum" level. PNG is currently attempting to get the Australians to agree to a set of principles which would guide the conduct of relations between the two countries in the future. Equally as important to PNG is agreement on an integrated development package which would give structure, direction and coherence to the various areas of assistance and cooperation between the two countries.

AID FROM OTHER SOURCES

Aid to PNG from non-Australian sources is currently very small. As noted earlier, Australia provides the bulk (about 85%) of PNG's external aid revenue. Of the balance, about 75% comes from multilateral sources[16], while the remainder comes from bilateral sources such as New Zealand, Japan, and West Germany. (See Table 3)

---

[16] mainly the World Bank, and the Asian Development Bank.

Table 3

AID FLOWS TO PAPUA NEW GUINEA
1980 - 1985
(million Kina, 1985 prices)

Source	1980	1981	1982	1983	1984	1985
Australian Grant Aid	175.5	284.3	186.7	212.7	225.9	208.4
Other Grants						
U.N.D.P.	1.7	1.2	1.2	1.4	1.1	1.3
New Zealand	1.5	1.5	1.5	1.8	1.9	1.9
Japan	0.3	1.2	1.1	0.9	1.0	1.2
Norway	2.1	2.7	0.7	-	-	-
EEC	-	-	0.4	1.8	1.7	2.3
Other	1.7	1.0	1.0	1.0	1.0	1.2
Sub-Total Other Grants	7.3	7.6	5.9	6.9	6.7	7.9
Concessional Loans						
World Bank:						
I.D.A.	7.5	6.6	6.7	14.0	12.3	5.1
I.B.R.D.	1.3	1.0	2.0	7.8	12.5	13.0
Asian Development Bank	8.8	14.3	8.0	7.9	5.0	8.4
West Germany	0.6	1.8	0.4	0.1	5.4	-
Japan			3.0	-	3.6	8.4
Kuwait Fund	0.3	0.2	0.2	-	-	-
Sub-Total Loans	18.8	25.1	20.3	34.7	40.6	34.9
Grand Total	199.2	213.1	210.7	251.6	270.5	251.2

Source: figures supplied by PNG Department of Finance and Planning

The most important reason bilateral aid has remained pitifully low in the past is not the lack of interest on the part of prospective donors, but rather it has been largely due to PNG's deliberate restrictive aid policies which were created, in part, to protect the aid realtionship with Australia. The unwillingness of PNG to relax this stance, until fairly recently, has resulted in fewer bilateral agreements than would be expected. Clearly, most aid donors insist on the opportunity to promote trade opportunities for their country through tied procurement. However, since this practice has been unacceptable to PNG in the past, it is no secret that it has resulted in much reduced levels of aid, particularly from Japan, West Germany and France.

But as Makis and Dahanyake (1985:24) acknowledge, there are also other reasons why non-Australian aid is acutely low. For example, they cite the "absorptive capacity" of the type of aid that is likely to be received as being limited. This suggests that from the PNG point of view, there is both an administrative constraint (lack of trained personnel to adequately identify, plan and coordinate projects) and financial constraint (lack of budget funds to finance the local component required by most donors of project aid). In addition, until very recently, aid administration in PNG has been so diffused that there was not one office which could claim responsibility for actively identifying and pursuing potential aid donors. For example, previously there have been two committees which have handled aid matters on behalf of the Government. The first, located in the Department of Finance, was called The Capital Assistance Coordinating Committee, and was composed of the Secretaries of Finance, National Planning Office, and Foreign Affairs and Trade. It was responsible for the formulation of all aid policies as well as for the administration of aid projects in excess of K250,000. The second, the Technical Assistance Committee, was composed of the Secretaries of National Planning Office, Finance, and Public Services

Commision. It was located in the former National Planning Office, and was responsible for the administration of all aid projects less than K250,000.

In both cases, although each committee's membership was made up of senior level executives, these officials were rarely involved in the committee's work, and were represented by subordinate officers of their department. The monitoring of aid projects, in both cases, can be best described as only cursory with most interest focussed only on the financial aspects (expenditures and projections). Implementing departments, as now, were expected to report progress and problems of their aid projects through the N.P.E.P process. Thus the responsibilities of aid management have been loose and divided and have resulted in duplication of effort, lack of consultation in decision making and a lack of appreciation of implementation constraints experienced by the various projects.

Realizing that this arrangement was inadequate with the likelihood of Australian aid becoming more and more project oriented in the future, and with the prospect of non-Australian aid increasing, the administration of aid was reviewed by the Government in 1986. The result was the establishment of a single division located in the Department of Finance and Planning (Foreign Aid Management Division). Its primary function was to maximise all development assistance and to ensure their consistency with national priorities. In order to achieve these objectives, the division was to draw up a management plan to monitor and review all aid programmes and to advise government on appropriate policies and strategies relating to aid.

Summary

Papua New Guinea gained self government in 1973 and independence in 1975. Since then the country has experienced impressive continuity in broad macroeconomic strategy. That strategy has been to promote economic stability and self reliance. The country's economic performance since independence has been beset by severe constraints, external to the country (oil crises, low commodity prices), resulting in real GDP decline. In spite of this, there has been considerable praise heaped apon the country for the aggressive and positive manner in which economic policies have been devised in an attempt to manage the economy.

One innovative initiative taken by the Government was the introduction of the National Public Expenditure Plan. This system of public expenditure planning emphasized the essentially political nature of allocative decisions and the interdependence of planning with other administrative functions. Also, by incorporating all external aid proposals within the NPEP, the government has afforded itself a much more powerful means of assessing its priorities in relation to external aid than have many other similar developing countries.

But although the NPEP was able to provide the necessary framework for improved planning and budgetting in the decade after independence - and so improve fiscal discipline and income distribution - it was not able to provide economic growth or stall the nation's growing unemployment. In 1986 a reform in the name of the Medium Term Development Strategy (and its Plan) was introduced and has aimed at longer term sectorally based planning.

PNG enjoys a special historical relationship with its former colonial neighbour, Australia. For whatever altruistic or self-interested reason, Australia has, in the past, contributed substantial untied budget support grants to Papua New Guinea. These grants, have, in addition to contributing towards an environment for political stability and the freedom for the country to pursue its own development priorities, had considerable influence on the formulation of the nation's aid policies, in that PNG was determined that its aid relationship with Australia should not be damaged by acceptance of aid from other sources on less favourable terms. As a result PNG adopted very restrictive aid policy measures (particularly with regard to procurement) deterring potential external aid donors in the process. This explains why PNG's bilateral aid agreements are small and very few in number. In the past, apart from Australia, the only other acceptable donors have been the multilateral agencies with their attractive concessional aid.

If the present aid agreement with Australia is an indication, it would appear that future trends in aid support to PNG will be less in untied budget grants and more in other forms of aid, particularly project aid. This being the case, PNG recently decided to relax one area of its aid policies, but in so doing, has received criticism for not going far enough. It is, nevertheless, some indication that PNG is now willing to look further afield than traditional areas, to secure the additional resources she will need to manage the economy for the future.

Chapter V

REVIEW OF DEVELOPMENTS IN THE EDUCATIONAL SYSTEM

This chapter presents a brief overview of how the educational system evolved during the period of colonial rule in both Papua and New Guinea. It also discusses in greater detail, the major reforms and further developments which occurred from the time of political independence up to 1985. The main areas of focus are those related to developments in educational policy, reforms in the educational structure and administration and changes in curriculum content and teaching methods. To facilitate formating, these developments have been arranged according to the various levels of education. It is important to point out that the developments described occurred only within the system of education as defined earlier in Chapter 1. It does not, therefore, attempt to include developments which may have occurred outside the jurisdiction of the Department of Education.

The Colonial Period

Prior to Western influences, the process of education in village societies of Papua New Guinea consisted of elders (adults) educating children, usually informally, as to values, customs and mores of their individual societies. Skills such as hunting, fishing, gardening and sorcery were taught and success was "determined by the acquisition of these various things - and with your success came importance in the community" (Edoni, 1980:184). It has been described as "designed to fit young people for the existing, largely unchanging society of the times. It was efficient for its purposes and satisfying for everyone" (Report of Five Year Plan Committee,1974:4).

Educational Developments in Papua

Western style education in both Papua and New Guinea began with the various missionaries operating in the south Pacific around the 1870s and 1880s. The first Administrator of Papua, Sir William MacGregor, set the precedence by allowing the missions to carry the responsibility of educating the natives and by making no attempt to influence their educational policies. The one exception being when, in 1897, he attempted to make education compulsory (3 days per week) for children aged 5 to 13 years (Meek, 1982:51). However, this policy was ineffectual since the Administration failed to provide the necessary resources to police it.

But the policies influencing native education in Papua were ultimately prescribed by one man, Sir Hubert Plunkett Murray, who was acting Administrator in 1907, and later became Lieutenant-Governor in 1909. Within the limits of his racist views, he suggested:

> I do not think that we should attempt to give the Papuan anything of a higher education, nor do I think that we should ever dream of conferring upon him any political rights. He is inferior to the European, and, if we wish to avoid trouble, we should never forget this, and we should never look upon him as a social or political equal. (cited in Dickson, 1976:23)

In 1913, Murray was interested in both technical and agricultural education for the natives. However, constrained by the Australian Government's view that pacification take priority over education, he continued to follow the policy of his predecessor and left the responsibility of education to the missions. After considerable persistence on his part, his proposals to tax the natives to provide educational subsidies for the missions was approved in 1917 under the Native Taxes Ordinances. Dickson (1976:28) explains that from 1920 subsidies were paid to mission primary schools providing classes were taught in English, and a *per capita* subsidy allowed for each successful candidate at annual examinations. Other subsidies to the missions provided for "general" education (teacher salaries, food, school materials and maintenance), "special industrial" education and agricultural education. Murray's educational priorities cannot be misunderstood - in 1924, he professed "I would sooner see a native a good agriculturist than a good scholar or even than a good carpenter" (Dickson,1976:29). The limitation of the subsidies scheme - only 10% of all expenditures were devoted to *per capita* subsidies, and extension beyond grade 5 was not recognized - gives testimony to Murray's attitude to the position of the native (Papuan) in society. Even though he is oft praised for his protection of native rights and culture, it appears there were distinct limits to his vision and perception. For it was Murray who believed in the innate intellectually inferiority of Papuans (a generally held belief by colonials at the time), "Europeans as a whole have an innate superiority over Papuans" (Dickson,1976:36).

As Meek (1982:52) notes, by 1940 only 3,000 students had been examined despite the fact that enrollment was estimated to be about 12,000-14,000 - most of whom were enrolled in mission schools "which offered little more than religious indoctrination in the vernacular." Thus it would be too simplistic to attribute the limits of education provision in Papua to simply a lack of finance or the ignorance of an unenlightened man. For it appears as a deliberate policy by the Administration to retard advancement in education in the belief that Papuans were not intellectually capable of assuming further responsibility and because of the greed of the business population of the time.

Educational Developments in New Guinea

As noted earlier in Chapter 4, Australia took control of German New Guinea soon after the outbreak of World War I in 1914. The few schools started by German interests were permitted to continue unimpeded until hostilities of the war ended in 1918. However, by 1920, the Territory of New Guinea was to be administered by Australia as a mandate set by the League of Nations.

Initially, the Administration decided that it would establish its own system of education and the inclusion of German mission schools into this system was rejected, mainly it seems because the missionaries were primarily German and there remained a lingering resentment and suspicion caused by the recent war. Meek (1982:53) explains that the Education Ordinance (1922-38) authorized the establishment of schools, the payment of teachers, and controlled expenditures from the Native Education Trust Fund. This Fund, similar to the one in Papua, came from direct taxes on the natives, and was meant to provide for their education. In 1933, this policy was discontinued, and taxes were paid into consolidated revenue from which future educational expenses were met.

In 1922, a technical school, an elementary school and a school of domestic economy was established with a priority towards practical training. Several years later these institutions were brought together near Rabaul but the total enrollment was still only 146 pupils. By 1940, government schools still numbered only 6, and enrollment had grown to only 588. It was envisaged that the elementary school might supply personnel for a docile labour force who would be subservient and "know their place". The occupations for which they were prepared were both lower level government service and school teaching.

The bulk of educational provision therefore rested with the missions. Meek (1982:55) describes mission education as "a composite of educational philosophies implemented by the different missionaries with little cooperation and no clear policy." By 1940, the missions were operating 35 training centres, 158 elementary schools, 2329 village schools with a total enrollment of about 65,000 pupils. But, as Meek informs, the quality of education provided at these institutions ranged from very good to nothing more than religious indoctrination.

Educational Developments After World War II

With the Japanese occupation of New Guinea in 1942, the civil administrations of both territories was replaced by the Australian New Guinean Army Unit (ANGAU), and essentially formal education ceased as the fight to win the war took precedence.

At the end of the war in 1945, the Australian Labor Government promised a "new deal" for the territories, as control was finally transferred to a civil administration which was now empowered to administer the two territories as one single unit. The Administration was now intent on becoming increasingly more involved in the direction and control of education. The first Director of Education, W.C. Groves was appointed in 1946, and he headed the newly established Department of Education that same year. Smith (1985:51) suggests Groves was full of concern over such issues as the impact of Western dominance on the natives and ideas such as education to be used as a "social instrument" to avoid "de-nativisation". But in spite of these concerns, the re-establishment of education was of lower priority than reconstruction, and of the resources that were provided to Groves, in 1948, three-quarters were used to fund the education of 690 expatriate children with the remainder providing for 2,108 native children (Ryan,1972:324).

In 1951 when Hasluck became Australia's new Minister for External Territories he showed considerable energy and commitment to improving the situation but he too was undoubtedly a devotee to the principle of "gradualism" for development.

> We will see a better educated native people, a more politically conscious and politically active native population who, very gradually, over a number of generations, will take an increasing interest both in running their own enterprises and in taking a share in their own government. (Hasluck, 1976:69)

He even suggested that Australia could look forward to a hundred years of suzerainty (Hasluck, 1952:228). The 1952 Education Ordinance provided the structure whereby government and missions could interact as well as provide advice to the Administration and to the Director of Education. It also established the Education Advisory Board, created education districts and the District Education Committees. In spite of this, however, Groves had failed to produce a plan for educational development, and Hasluck, reluctantly, was forced to set out his own scheme. The elements of which were that:

> (a) Attention should first be given to primary schools with the goal of teaching all children in controlled areas to read and write in English.
> (b) for the above purpose,
>   (i) efforts to be made to ensure the co-operation of the Christian missions, and,
>   (ii) special attention to be given to teacher training
> (c) Manual training and technical training to be developed both in conjunction with the primary schools and in special schools in response to the developing needs of the people.
> (Hasluck,1976:97)

With Hasluck's emphasis on universal primary education (UPE) and his apprehension towards the early development of an elite, no formal high schools were created in the 1950s. Hasluck and his supporters justified this by explaining that having inherited a dismal system of education in the first place, and believing that he had several decades in which to work, it was necessary, in the first instance, to establish a strong foundation (elementary level) first and then work from the bottom up. Yet when reminiscing on this subject in his memoirs years later, Hasluck states that "Looking back on this period, across the gap of the years, I appreciate now that I may have been focusing too sharply on one aspect of education" (1976:222).

After Groves' resignation in 1958, his successor, G.T.Roscoe, working in harmony with Hasluck's views, commenced a program of trebling the number of Administration primary schools and assisting with the upgrading of mission schools, so that total enrollment in recognized primary schools between 1959-63 had more than doubled to 150,000 (Smith,1985:53).

But by the early 1960s changes in development policies were inevitable as well as essential. The driving forces behind the call for change came from both within and outside the country. From within, there were now increasingly large numbers of primary students who would need to be accommodated at higher levels, and the more sophisticated areas (coastal) were no longer content to wait for other areas to catch up. As explained earlier, external pressures against colonialism from the newly independent African nations was very influential at the time. But the single most important factor, without doubt, was the recommendations of the visiting mission to PNG in 1962. In reporting to the Trusteeship Council of the United Nations they criticized Australia's slow progress and denounced Hasluck's 1961 plans of expanding the educational system as inadequate. Thus Australia's policy of uniform development for PNG was abandoned in favour of creation of an elite who would lead the nation to self government and independence some time in the near future.

This new change in direction involved a considerable increase in public expenditure, of which a significant amount came from Australia's Commonwealth Grant. Downs (1980:122) reports that in the period 1962-69, total expenditure almost doubled. Not surprisingly, educational policy became a key factor in the Administration's development after 1962.

In 1963 Hasluck appointed a Commission on Higher Education in Papua and New Guinea to give attention to

> The establishment in the Territory at the earliest practicable date of an institution or institutions to provide education at or near the university level; and the range of courses, the degrees or diplomas to be awarded, the standards of entry and of graduation, and the staff and facilities likely to be required in successive stages of the

> development of such an institution or institutions. (Botsman,1976:138)

The Commission was chaired by Sir George Currie and the report (Currie Report) was sent to the new Minister for Territories, C.E.Barnes, in 1964. The commissioners recommended the establishment of an autonomous university and an institute of higher technical education. Although the latter was approved without question, the proposal for a university was the subject of much debate by the Australian authorities. Both institutions were established several years later. But of more interest to this study, was the commissioners' recommendation for more "balanced" educational development. For some time thereafter the focus of education became the expansion of secondary schools. Prior to this time, post primary schools went only to Form 3 (grade 9) level in a few mission schools and consisted mainly of preparing teachers for primary schools. For example Smith (1985:58) notes the Administration's only high school in 1963, Sogeri, had 46 students enrolled in Form 4. This situation soon changed, because during the decade 1962-1972 enrollments in secondary schools increased on average 18% annually, increasing from 3,340 to 24,335. This meant that the goal of UPE was put on hold in an effort to "balance" the educational system and to provide the manpower requirements for waged employment.

By the late 1960s there were on the one hand, the various mission agencies who were providing 65% of primary education and 35% secondary education and the Administration (through the Department of Education) providing the remainder. The financial burden on the missions to provide this service was enormous and there was considerable resentment and doubt by the mission agencies about their ability to continue to provide to education. External Minister Barnes appointed a three-man Committee in 1969, chaired by W.J.Weeden, to advise on the mission-Administration relationship. Barrington Thomas (1976:7) says that the Committee found that "what was lacking was a completely national system of education in the sense that there should be equality of salaries, duties and conditions for all teachers, whether employed by the missions or the Administration." The influence of the Weeden Committee report led to the creation of a national education system through the provisions of 1970 Education Act. Within the new system education was to be the responsibility of the Territory Education Board with certain responsibilities and power devolved to local authorities, i.e., District Education Boards, local government councils, Boards of Management (community schools) and Boards of Governors (high schools). It also created a National Teaching Service whose members would now be employed by a Teaching Service Commission (regulated by the 1971 Teaching Service Act). The system now made possible transferability of both staff and students within the sytem, and a uniform and equitable system of employment and conditions for staff and standardization of the curriculum. One important requirement of the Act was the production of an education plan by the National government and District Education Boards. This requirement, as we will see later, stimulated early interest in educational planning in PNG.

What had been accomplished up to the early 1970s, may be best described as impressive advances towards the development of an education system. But the Administration realized that despite these achievements in a relatively short time, much more was needed in order to lead the country into self government and later independence. The concerns and inadequacies of the system were frequently aired by politicians in the House of Assembly, by academics in papers and reports, by concerned educationalists in departmental meetings, and by the general public in the newspapers and on street corners. Concerns ranged from the fact that school fees were a burden on parents, that there were insufficient places in both primary and secondary to meet the demand, that the overall quality of education provided was below expectations. Concern was also expressed that teachers needed better training and that the facilities and opportunities for technical and vocational schooling were inadequate. Also, there was worry that the arrangements for further education provided by the two universities was below public expectations.

Educational Developments 1975 - 1985

The response of the Government to the concerns raised earlier, were indicated in a number of policy statements and position papers regarding structural, programmatic and administrative reforms - many of which were planned and implemented prior to, and after the country gained its independence in 1975. Included in the Government's development plans of 1976 and its mid-term review of 1980, were policy objectives on education which reflected the acceptance, by the government, of the principle and promotion of equality of education at all levels - but particularly at the primary level.

Essentially, the commitment was to the continued expansion of community education. The primary goals were to strive to achieve universal primary education; to provide students' with a general education which would help them to live a more productive life in the role of their choosing; and, through upper secondary education, provide skilled manpower necessary for national development. The rationale for the ensuing developments which took place in this period was most aptly articulated in a statement to all education personnel at independence by the then Minister of Education.

> Our future prosperous and harmonious society, one which will be progressive and stable will be dependent on the combined effort of all citizens dedicated to the task of building this young but rich nation of ours.
> The Eight Point Improvement Plan with its emphasis on rural development, decentralization and self-reliance is now the main guideline for the National Education System. Since the role of the Education System is to prepare people for the type of society our country is wanting to develop, it is essential that all other government policies be directed towards the

> Our school system has to play a major role in enabling Papua New Guineans to qualify for important positions in the work force as well as educating large numbers of children to successfully adapt to the many social, political and economic changes that will confront them.
> (Rueben Taureka, Minister for Education)

An examination of the policy objectives and priorities in education during this period reveals a pattern of planned developments which were in keeping with the Minister's general educational philosophy. Among the more specific aims and functions of the education system were the following:

1. Continued commitment to achieving the goal of universal primary education
2. Continued expansion of secondary education, where possible, to reduce the inequality amongst provinces
3. Curriculum development, for both first and second level education, to be relevant to the needs of society - in that it focuses on development of basic skills of literacy and numeracy and their practical applications, as well as emphasizes positive social attitudes
4. Continued support of vocational and nonformal initiatives for out of school youths/adults
5. Expand and upgrade the quantity and quality of technical training to be able to meet the manpower and training skills requirements of industry, commerce and public sector
6. Expand and upgrade teacher training facilities
7. Increase the rate of localisation within all levels of the system, and at both national and provincial
8. Improve the planning and management of educational resources by administrators, particularly at the provincial level
9. Enhance national unity

In pursuit of these objectives, major structural and operational changes were planned and implemented between 1975 and 1985.

Developments in Structure

Although the political process of decentralization was not enacted until March 1977 by the *Organic Law on Provincial Governments* , the Department of Education had, in many respects, commenced this process much earlier through the 1970 Education Act. As detailed earlier, this Act incorporated into a single educational framework both administration and mission schools, as well as the distribution of specific powers and responsibilties for education between the Department of Education, the various mission agencies and local government authorities.

So the powers conferred on provincial governments by the Organic Law were not, in themselves, new to the education sector - and were considered by many to be merely enlargements of some areas. Responsibility for the provision of education in PNG is, therefore, divided into National government functions (*concurrent* subjects) and Provincial government functions (*provincial* subjects). Specifically, the national Government is responsibile for: universities, teacher training, technical education, national high schools, school inspections, examinations, and the curriculum in "core" subject areas. Provincial governments are responsibile for community education and the curriculum of "non-core" subject areas. Obviously in such an arrangement there is sometimes an overlap and sharing of responsibilities. This has occurred in the following areas: high schools, vocational education and non-formal education.

But after considerable negotiation between the national government and the provinces the *1983 Education Act* was passed and this helped to extend and define more clearly the division of powers. Under this Act, full control of lower secondary schools and vocational centres was transferred to the provinces. It permitted major decision-making powers for provincial governments by enabling them to pass their own education acts. It allowed the use of vernaculars in non-core subjects at the primary level, changed the composition of the Provincial Education Boards, and set minimum age for entry in community schools.

While it is true that decentralization has been fraught with complex planning and coordination difficulties, it is also true that in the education sector, it has provided more local autonomy and greatly assisted in localization of the workforce. Also, many see decentralization as strengthening and maintaining a unified system. But perhaps its greatest contribution to the nation has been in the area of training of provincial personnel. In the past this training of provincial staff had been sorely neglected and needed much attention if provincial governments were to carry out their responsibilities effectively.

Developments at the Primary Level

Community schools (grades 1-6) are the responsibility of provincial governments, and as such are administered by the provincial departments of education. In keeping with the National government's commitment to pursue universal primary education, there has been substantial quantitative expansion at the primary level. Community school enrollments have increased by 47% (from 238,318 in 1975 to 351,171 in 1985) which equates to an increase of approximately 4.0% per annum (See Table 4.) Although this has been considerably in excess of the population growth rate, it also shows that targets set in the Education Plan 1976-1980 have not been realized, and that the goal of UPE has had to be revised to a more realistic date well after the turn of the century.

Table 4

PNG Schooling Statistics
1960 - 1985

Type of Institution	1960 Institutions	1960 Students	1970 Institutions	1970 Students	1980 Institutions	1980 Students	1985 Institutions	1985 Students
Community	1141	88679	1557	208419	2045	284089	2358	351171
Provincial High	39	2064	62	17929	97	36205	113	46317
National High	0	0	0	0	4	1562	4	1645
International Primary	46	3350	63	6839	32	6165	34	5558
International High	-	116	-	4959	2	863	2	1111
Vocational Centres		577		3140	88	3992	88	6843
Technical Colleges	11	676	70	1575	9	3778	8	1687
Primary Teacher Trng Coll	26	814	12	1476	9	1957	9	1887
Secondary Teacher Trng Coll	-		1	350	1	413	1	400

Source: PNG Education Staffing and Enrolment Statistics
Notes: (1)Data are not strictly comparable due to changing school structures
(2) Data for 1960 are not fully reliable

In addition, the enrolment rate for the 7-12 year age group increased from 55.7% in 1975 to 65.0% in 1985. This enrolment growth has been made possible by an increase of 34% (up by 596) in the number of community schools, and an even larger increase (45%,up by 3511) in the number of employed community school teachers. At independence, all community teachers were citizens of the country. The community school inspectorate has grown from 78 in 1978 to 150 in 1985. Part of this increase can be attributed to the change in role from supervisory to advisory and coordination of teachers and their in-service training. Today, the inspectorate consists of inspectors and curriculum advisors all working together as a team.

One of the most important attempts at reform, in community education at independence, was the re-orientation of the role of first level education to that of *community-based* education. This change was introduced by the Education Plan 1976 - 1980 and had as its guide the government's National Development Strategy (1976) which stressed the need for rural development and self reliance. This necessitated the preparation of community school syllabi for all grades. So although basic skills in literacy and numeracy remained unchanged, this shift in emphasis meant that increased priority was to be placed on practical learning activities derived from the local community. However, despite the high expectations held for community-based education at the time, commitment to its implementation, at both national and provincial levels, was never strong.

During this period, several innovative projects were commenced with the aim of improving community education. In 1977 the Indigenous Mathematics Project (IMP) commenced research into traditional mathematics learning methods and systems in five community schools. The aim of the project was to gain a better understanding of the role of culture and environment on different rates of mental growth. The project concluded in

1981 with over 20 detailed reports, the findings of which have benefitted curriculum developers in general, but mathematics in particular at both levels of secondary.

In keeping with the government's concern for the development of rural welfare, an integrated rural development project was commenced in the East Sepik Province in 1977. The education component reflected the Department's policy initiatives to improve the nutritional status of all schools. When the project ended in 1983, considerable benefits had accrued to both the province and education in general through the development of an integrated curriculum approach to health, nutrition and improved subsistence agriculture. Considerable agriculture/nutrition equipment had been distributed to most provincial schools and a large proportion of community teachers had received in-service training on the new approaches and techniques. This project obviously provided the impetus for another pilot called Agriculture Extension Project which commenced in 1984 in sixteen community schools in the Morobe and Eastern Highland provinces. Its purpose seeks to improve students' skills and knowledge of subsistence agriculture.

Attempts by the government at reducing regional differences in educational opportunity were instigated by setting up of the Community Sectoral Programme in 1980. This provided provinces with the incentive and challenge (by an allocation of K3.0 million) to improve community education in their provinces. In 1983, with a sum of K5.8 million, this initiative was expanded into the Provincial Primary Education Fund, and a sophisticated "disadvantaged index" was devised to discriminate in favour of those provinces deemed to be disadvantaged with respect to access. Within their allocation, provinces have been at liberty to choose how this money was spent. Although most chose to employ additional teachers, attempts by the national Department were made to encourage some of this money to be used towards other types of qualitative improvements.

At the national level, particularly since 1981, considerable attention has been placed on qualitative improvements. In 1981 a Committee of Enquiry into Standards made important recommendations for the improvement of both community and secondary education. Also, at considerable expense (K4.5 million), a new curriculum unit and printshop were constructed and equipped, and textbook writers for mathematics, community life and health were recruited to produce texts in those subjects for grades 4, 5 and 6. In addition, the schools' radio broadcast section received a new, well equipped broadcast facility and studio, and a consultant was employed to advise in the upgrading and producing of material for community school broadcasts.

The former examinations branch has been revamped into the Measurement Services Unit and has been improving the writing, trialling and evaluating of results of nationally prescribed examinations at grades 6, 10 and 12. In 1985, approximately 41,000 grade 6 students sat for their primary final exam. The method of selection for determining who goes into secondary (grade 7), by each of the provinces, continues to vary from purely examination results to a percentage-mixture of examination/quota. Critics of the former selection method suggest that this tips the whole selection method in favour of urban children and will in the long run have serious social consequences. But despite the impressive expansion of schools and enrollments, entry to secondary has in this period remained a constant 33%, and overall enrollments in secondary as a percentage of the 13-16 year age group remains a dismal 14%. In addition there is considerable concern at retention rates in community schools - currently, only 70% of children who begin grade 1 actually make it to grade 6. Special provisions have been made in several of the aid-assisted projects to specifically address the retention problem. At present, indications are that this problem is deeper than education authorities had first suspected, and will need more closer examination and attention than previously given.

Developments at the Secondary Level

Lower Secondary

Provincial high schools (grades 7-10) are a the responsibility of provincial governments and they are administered by the provincial departments of education. The recent growth of secondary education, although modest in comparison to the spectacular surge in the late 1960s and early 1970s, has nonetheless been impressive. The number of provincial high schools has increased from 78 in 1975 to 113 in 1985. Accompanying this expansion of schools, was a substantial 61% growth in enrollments (up from 28,799 in 1975 to 46,317 in 1985). These figures equate to a consistent 4.86% p.a. growth over this period. The secondary teaching force not only increased by 57% (from 1144 in 1975 to 1795 in 1985), but its localisation also improved from 40% to 80% during the same period. But perhaps one of the best indications of growth and advancement towards equality of opportunity in lower secondary is the pattern of grade 7 enrollments (assuming that approximately same rates of retention/attrition apply across all provinces). Although there is still considerable room for improvement, from Table 5, it can be seen that many of the disadvantaged provinces have shown improvement. e.g., Southern Highlands, West New Britain. But the considerable imbalance of the sexes in grade 7 enrollments at independence (females accounting for only 30%) continues to be problematic, improving only slightly by 1985 to 37%, and remaining a disappointing 36% across all grades in provincial high schools.

It should be noted that despite increased public demand for new provincial high schools, planners at both the national and provincial levels have had to face two major constraints: available finance and the consequences of unemployed school leavers (by exceeding manpower requirements). Since the transfer of responsibility for these schools now rests with provincial governments, it has resulted in the conversion and building of

Table 5

Enrolment Increase in Grade 7 in Provincial High Schools
1975 - 1984

Province	1975	1984	% Increase	% of 13 -16 Year Enrolled (a)
Southern Highlands	399	887	122	13
West New Britain	264	535	102	15
Eastern Highlands	429	839	96	9
Enga	309	551	78	10
Morobe	769	1359	77	11
West Sepik	328	559	70	15
Madang	722	1197	66	12
Western	309	494	60	17
Papua New Guinea	**9864**	**14586**	**48**	**14**
Western Highlands	557	804	44	11
East Sepik	656	937	43	11
Milne Bay	449	619	38	15
Gulf	231	317	37	14
North Solomons	516	698	35	16
Manus	234	316	35	29
Simbu	557	719	29	13
Central	684	875	28	23
New Ireland	506	611	21	23
East New Britain	977	1172	20	24
National Capital	657	781	19	30
Oro	311	316	2	12

Source: PNG Department of Education, Staffing and Enrolment Statistics
Note: (a) figures here have been extrapolated by writer from 1983 source

day high schools (as opposed to boarding schools previously) with resultant lowering of per capita costs.

In 1975, 40% of all grade 8 students involuntary dropped out of school, unable to continue their schooling. Since then some improvement has been realized, so that by 1985, this figure had been reduced to 21% of all grade eight students. Also, in an effort to build upon the foundations laid in community schools and to ease the transition from primary to secondary, *generalist teaching* in grade 7 was instituted in 1975. However, due to poor planning and little support few schools were able to achieve any success.

One of the most innovative secondary projects undertaken began in 1978. The *Secondary Schools Extension Project* (SSCEP) trialled a new approach to curriculum implementation in several high schools in various provinces. The main aim of the project was to test if provincial high school programmes could be modified to provide an education more relevant to the community development needs of the nation. Students spent about a third of their time working in practical projects (which were carefully planned to reinforce core subjects) relevant to the local community. Thus, technical skills reinforced academic skills in an interesting way. In addition to the project work, schools also operated "out-stations" and extensive community involvement programmes. These planned learning experiences were designed to foster positive attitudes towards rural life and an understanding of the problems and needs of the rural community. One of the "attractions" in SSCEP schools is that there are no grade 8 leavers - students commence in grade 7 and finish in grade 10. In 1984 a special Diploma course was established at the University of Papua New Guinea to familiarize secondary teachers on structured school-based curriculum development as used in SSCEP schools. In addition, the Department of Education introduced a SSCEP in-service programme for the increasing number of new schools coming into the project. An external evaluation of the project, completed in 1975, is currently being studied; but early indications are that attitudes towards the project by the participants are positive, and that students' participating have not been disadvantaged in their academic performance or job placements. Whether the country could afford the expense of further expansion of this scheme to more provinces is doubtful given the costs involved and the current reduced level of educational funding.

Curriculum development has seen much progress in lower secondary. While initially much importance was placed on preparing practical skills and self reliance, after the findings of the Committee of Enquiry into Standards (1981) the focus became more academically oriented. Teaching methods, particularly in English and Mathematics, changed. For example, in English, a more functional approach is now used in that reading, writing, listening and speaking skills are taught together. Also an impressive amount of work has been done in producing and upgrading - syllibi, teachers' guides and student texts for grades 7-10 - curriculum materials. Much of this textbook and curriculum development work is funded by the *Secondary Education Project*. This project has also been instrumental in providing considerable in-service training opportunities at the degree and diploma levels for high school teachers and inspectors.

Upper Secondary

National high schools (grades 11-12) are a national function, and as such are administered by the national Department of Education. These schools aim to prepare students for tertiary studies (approximately 83% of graduates) and to meet the requirements of both the public and private sector (approximately 17%).

Although not all grade 10 graduates seek entry into national high schools (some opt for the direct entry route to universities), selection is difficult considering the limited number of places available. Enrollments have increased 96% (from 836 in 1975 to 1639 in 1985). The number of national high schools have increased from two to four. Although the mid-term review (1979) of the Education Plan 1976-1980 called for a national high school to be built in each province this was never really possible, if only for financial reasons. Although limited expansion has taken place at each of these schools through the Education II Project, it may be necessary in the future to expand even further if the preliminary year of the universities is ever to be phased out.

Also through the Education III Project, three curriculum coordinator positions were funded at each of the national high schools. This staff was responsible for preparing resource materials and improving coordination of this material between the schools. Under the aegis of this project, funds have been provided to upgrade existing facilities of each school and to finance both local and overseas fellowship training for national teachers who show potential.

Developments in Technical Education

Technical education is a function of the national government, and its activities are administered by the national Department of Education. Prior to independence 69% of students in the technical colleges were in grade 9/10 general studies stream - which meant they took a normal secondary course with technical study in one trade. In 1978 the general studies stream was dropped and these institutions became more post-secondary in orientation, with an expanded capacity for other courses. In 1979 the Apprenticeship Board changed its policy for those wishing to begin apprenticeship training. It then became mandatory to have completed a pre-employment course prior to enrollment in apprentice training. Pre-employment technical training (PETT) courses, introduced in 1974, were introductory courses of variable duration (usually 40 weeks) catering to grade 10 leavers. Later this was to become the main area of operation for the colleges.

Apprenticeship training requirements were also revised. In addition to having to complete a PETT course, apprentices are now required to attend a technical college for 16/24 weeks during each year of their apprenticeship. The colleges also run technician level courses. Training in these programmes has benefitted from an external aid project aimed at increasing middle-level technicians in industry, commerce and government. A library was built and equipped, laboratories were constructed and equipped (at one college), and three curriculum consultants were employed to assist in the mounting of several new courses.

Since the technical training courses offered and planned are guided by projections on technical manpower requirements of the various sectors of the economy, it was important that some assessment be made to accurately predict future needs. In 1979 the National Planning Office produced the first National Manpower Assessment (NMA) report which forecast the requirements for a vast increase of technical training. A committee comprising of representatives from the Departments of Works, Labour, Education and NPO using the NMA projections produced a package of development activities which was to form the basis of the externally funded Technical Education Project.

This project, commencing in 1982, has provided substantial new additions of staff and equipment to the existing secondary teachers college for the establishment of a technical teacher training centre. Upgrading and expansion of existing facilities, funding of additional staff and the provision of equipment and furniture to the existing seven technical and two secretarial colleges is now in progress. Unfortunately, only four years after the commencement of this project, the NPO produced the second NMA which suggested that the economy was in decline and that too many people were being trained in technical fields. Amongst other things, this again shows the difficulty of relying too much on the manpower approach to planning.

Developments in Non-Formal Education

Non-formal education (NFE) is a function of provincial governments, and is administered by the provincial departments of education, although the national

Department continues to have responsibility for vocational school inspections and correspondence education. However, in addition to the Department of Education, various NFE activities are also administered by other government departments (Primary Industry, Health, Commerce, Youth and Recreation etc.) as well as a multitude of non-governmental organizations .

Non-formal education in PNG is primarily concerned with two distinct areas: basic education (literacy and numeracy skills, skills aimed at generating opportunities in the non-formal sector) and vocational education (providing skills for school leavers for wage employment). Prior to independence the national department of education focussed its attention almost exclusively on vocational education. Programmes provided courses of one or two years in basic technical and agricultural skills so that young people could later earn a wage. In 1975, operating from within the Department's Technical Division, there were 93 vocational schools with an enrolment of 5415. By 1985 there were 88 schools with an enrolment of 6843. Although staffing had only slightly increased (from 306 to 371) during this period, a significant fact was that the localisation of staff had improved substantially from 43% to 72% by 1985.

The Education Plan 1976 - 1980 called for urgent reform in the provision of adult education (p.90), and it recommended "informal activities within the local urban or rural community, aimed at nation building, promoting supportive attitudes to development, and stimulating an interest in the acquisition of literacy and other skills which may be taught informally or through other more structured programmes."(p.91)

In 1973, 14 "skulankas" (school anchors) had been established to provide a post-primary option for community school leavers. But it was seen as a diluted secondary course and due to a lack of community support was eventually phased out by most provincial governments by 1980. Also starting in 1973 was the Community Secondary Education scheme which was also to provide learning opportunities for community school leavers. Students were to be under the guidance of voluntary coordinators and would be locally managed and funded. Despite initial success (particularly at church missions), both community expectations and support waned, and by 1980 this had died out.

In 1974, each province was provided with a position of *adult education officer* and by 1978 these had been filled. Each were to attempt to act as a catalyst helping adults to identify their basic educational needs and to organize activities to meet those needs. These have proved successful only in those provinces where the officers were energetic and motivated, but too often funding priorities proved to be a serious constraint and training was lacking. Consequently non-formal education stalled and its credibility with the public waned.

In 1976 the Village Development Centre Pilot Project, an aid funded initiative, commenced an experimental project in five vocational centres. Basically the emphasis was to go from trade training to village development. Students were expected to be involved in community development projects. Although there was some success, many of the original objectives were thwarted due to poor organization and management (Weeks, 1985).

Many provinces have been engaged in non-formal activities, particularly using the integrated approach. In the East Sepik province, a rural development project, externally assisted was commenced in 1977. In his evaluation of this project, Weeks (1985:27) cited the in-service training of inspectors, principals and teachers as well as women settlers at the Gavien Inservice Centre (from 1978-84) as having the most lasting impact of all the sub-project's activities. Unfortunately, the impact of the project may not be as great as planned due to a lack extension work which, although it did begin, has now declined considerably.

In 1979, another aid assisted project, the Southern Highlands Rural Development Project commenced. The education component contained a NFE section which sought to emphasize agriculture, nutrition and literacy in the context of village development through the development of education programmes (Education Annual Report, 1978-79:14). Although it has had some serious setbacks, in general it has had considerable effect. In particular, the creation of a network of community learning groups throughout the province has assisted youth and womens' groups to undertake and find financial support for small projects. In addition, the project has assisted in the installation and spread of rural water supplies in villages. The structure of NFE in this province is said to be a "potential model for all provinces " (Appelis, 1985:70).

In 1980, an external aid agency, expressed an interest in supporting a project for disadvantaged children which would reduce the level of malnutrition and increase their educational and social potential. In 1981, feasibility studies were complete and another aid agency agreed to support the proposal as well. After short listing several areas, Lumi and Malalaua sub-districts were chosen, and the project commenced in 1983. Using an integrated approach to improve health, education, agriculture and community life the project aimed to develop a model of community development by coordinating a range of extension activities and staff training. Various workshops and training have been given to the many stakeholder groups in the vicinity. Although it is perhaps too early to give an assessment of this project, initial indications are that it is progressing well.

Under the auspices of the Office for Village Development a NFE sectoral programme was commenced in 1980 and in 1982 the New Zealand Government agreed to support the programme. Unfortunately, due to a lack of commitment from the national level in supplying the necessary resources to effectively monitor and evaluate the non-formal projects, considerable waste and often misuse of funds resulted. By 1984, the responsibility for the non-formal sectoral programme had been transferred to the national

Department of Education. An allocation of K405,000 for each of the next four years was to have been made to the programme. A National Management Committee was created with considerable representation from all stakeholders and new funding criteria established. However, due to a lack of skilled personnel appointed by the Department to complete this task, compounded by untrained staff in the provinces, this programme had failed by 1987. Many critics continue to claim that non-formal education will always be doomed to failure until there is better integrated projects across sectors and until provinces are given full financial support to operate and manage their own non-formal activities without central interference.

Developments in Teacher Education

In 1975 there were nine pre-service teacher training colleges (of which 7 were church agency administered) with an enrollment of 2,135 students and staff totalling 166 lecturers. By 1985, this had dwindled to 7 colleges, an enrollment of 1,928 and staff totalling 147 lecturers. By 1977, in the interest of quality improvement, it was decided that entry to the colleges should be restricted to only grade 10 graduates.

By 1978 staff workshops had produced, through a united effort of all colleges, the first national course objectives. These objectives formed the foundation for consistency across teacher education. Curriculum revision, through boards of studies, concentrated on implementing the *community-school* concept as outlined in the Education Plan 1976-1980. However, in 1978, when the question of standards began to emerge, there was considerable consternation by college staff who felt that they were being asked to do too much with students in their 2 year course (Papua New Guinea, 1985:61)

The Staff Development Unit of the teacher education division commenced operations in 1973. It had two important functions: in-service training and localisation. In 1979 all pre-service training was phased out of one college, and it then became the new Port Moresby Inservice College. The College's activities now centralized all departmental professional in-service training for inspectors, principals and teachers. By 1985 the College had an enrollment of 155 in-service students and a staff of 25. In 1982-83, as part of a large external aid project, considerable capital works improvements were made to improve College facilities. These were: a new library, classrooms, dormitories, assembly hall and sports facilities.

The concept of *localisation* is the replacement of expatriate contract workers with local citizens. The task involves both the identification and training of suitable national officers for further promotion, usually replacing expatriate contract workers. As can be seen from Table 6, localisation has made great strides in this period.

Developments in Administration

Since it is the government's intent to continue to reorganize and strive for further improvement of the educational system, it is necessary to examine developments in administrative arrangements and processes which accompanied the developments described earlier in this section.

As shown earlier, the goals of PNG education before and immediately after World War II were almost exclusively directed by the various Christian missions, and in the 1950s and 1960s increasingly set by the Australian Administration. By 1970, however, with the establishment of the National Education System and some prompting from the World Bank[17] pressure was exerted to produce a national plan.. This was achieved, and in fact, by 1976, five draft national education plans had been produced with considerable debate over each, as to their acceptability, ensuing. The unacceptability of some of the draft plans arose because of the perceived need, by some, to radically

---

[17] who wished to provide a substantial loan, but insisted on the production of a national education plan as a pre-requisite

Table 6

Localization Rates in PNG Education System
1970 - 1985

Area	1970 Total	 % PNG	1975 Total	 % PNG	1985 Total	 %PNG
Community School Teachers	5429	85	7475	99	11335	100
Community School Inspectorate	22	35	-	-	150	100
Vocational Centre Teachers	-	-	133	43	269	73
Provincial High School Teachers	846	13	1114	37	1464	82
Technical College Instructors	-	-	37	14	119	49
Teachers' College Lecturers	-	7	27	16	67	46
Upper Level Staff (E.O.8/CC8)	37	19	89	54	147(a)	56

Source: Adapted from Crossley et al., PNG Department of Education. 1986:35
Note: (a) 1984 figure

reorientate the existing sytem. Despite its limitations and shortfalls, the plan which was accepted by Cabinet was modest in outlook, and was a significant step in the development of an educational planning process. The 1976-80 Education Plan also made provisions for a mid-term review of the Plan, and this report was " the most comprehensive yet, and included computer projections based on alternative economic and population growth assumptions" (Bray, 1984:430). Unfortunately, the full impact of either of these two documents was never to be realized because the introduction of the NPEP and decentralization at about the same time (1977/78) was to supersede them. Nevertheless they both served as important reference points for departmental activities until the Medium Term Development Strategy was produced in December 1984.

But educational planning from this point on became, in a sense, a joint effort between the national Government, the provincial governments and the Department of Education operating through the NPEP. For example, with respect to expansion of secondary education, the Department had to defer to the manpower planning approach and projections (sometimes against its better judgement) of the National Planning Office (NPO) and its advice to Cabinet. But given this set of circumstances, in 1980, there appeared no urgency to produce a new plan to replace the old since all new educational initiatives were being screened, approved and integrated into overall national priorities via NPEP. As McNamara (1985:3) points out this actually worked to the benefit of the Department of Education since in 1980 the government was falling short on its expenditure targets for the Rural Welfare objective. Education through careful planning[18] was able to increase its share of the development budget at the expense of other less-organized departments.

On the other hand, decentralization, and the introduction of 19 new provincial divisions of education has proven to be more problematic. Although, legally, considerable power had been transferred to the provinces through the Organic Law on Provincial Governments, in reality, few provinces had the skilled personnel to use their powers effectively. Thus planning in education at the provincial level was almost non-existent for a time. One of the objectives of the externally funded Education II Project, launched in 1981, attempted to address this problem through the provision of four consultants to assist provinces in training, liaison and specialist advice with respect to planning. In addition it provided an in-service educational planning diploma course primarily for the provincial educational planners. Despite its mixed success, educational planning at the provincial level has shown overall considerable improvement, and by 1983 all provinces had completed at least a draft educational plan. To be sure, the plans varied considerably in quality and practicability, but the benefits and experiences gained from the exercise were enormous in terms of clarifying thinking and encouraging efficiency.

---

[18] of the Education II Project

At the national level, the Department of Education set up a Division of Policy and Planning in 1977.[19] Its purpose was to advise departmental executives on major policy matters and possible alternative policies and plans. One of their biggest activities, at this time, was the participation in the mid-term review of the Education Plan 1976-80. In 1978, the policy and planning branch with the assistance of IIEP, commenced a review of its training needs for planners and administrators. By 1980 the Administrative Improvement Programme to train provincial professional assistants in planning had commenced, but this was soon taken over by the activities of the Education II Project.

An important development within Planning Services was the creation of the Overseas Aid Unit in 1981. The division's responsibility was thus enlarged from one of planning and coordinating provincial education NPEP requests to being responsible for the implementation and management of all major aid funded development projects involving education.

---

[19] renamed Planning Services Division in 1979

But planning at this level has focussed almost exclusively on primary, secondary and technical level education with considerable emphasis on the coordinating and liaising role and less on planning. Critics claim this has been to the detriment of the whole system and in particular to teacher education and non-formal education. It was not until late 1984 when the Government decided to move away from the NPEP approach "to provide a more adequate composite planning horizon for firm national advance planning" (McNamara,1985:5) that the Department of Education was forced under the new Medium Term Development Strategy to produce a much needed education plan.

One important innovation, whose effects appear to have already benefitted the administration and operations of the department, was the establishment of the Evaluation Unit. Originally created in 1981 as a device for monitoring the implementation of the Education II Project, its role was later expanded to provide evaluative studies for decision makers on other externally funded projects as well as provide high level assistance on various departmental activities. However, because of its strategic position within the Department and the capabilities of its personnel, demands for its services from all levels have been considerable and beyond its resources. The danger here being, that in attempting to service all of the requests placed upon it, the job of evaluation has in some respects been watered down or worse, pushed into the background.

Summary

This chapter has presented a broad overview of the development of the education system from its inception during the colonial period up to 1985. In addition an attempt has been made to identify and describe in detail the major achievements prior to, and after the country achieved its independence.

With regards to structure, it was revealed that Department of Education had shown considerable leadership in provincializing education long before 1977 when decentralization was legislated. But concomitant with the transfer of responsibilities to the provinces, policy dilemmas for educational development emerged. The National Department of Education clearly stood on the side of universal primary education while many provinces disagreed choosing more selective concentration of effort through further secondary expansion. Despite this, enrollment rates nationally for the 7-12 year age group continues to show improvement at the primary level as does equality of provision amongst provinces. But measures at improving retention will have to be seriously addressed if quantitative expansion at this level is to grow further.

Whilst the concept of community-based education was good in principle, its results have been disappointing. Some of the plans of the Medium Term Development Strategy (e.g., School Agricultural Pilot Project) hoped to reverse this, but a more concerted effort on the part of both education authorities and local communities will be needed in the future if the whole concept is to succeed. In the area of development of community school materials (i.e., syllabi, teachers' guide and students' work books) an impressive start has been made, and this work is continuing.

At the secondary level, measures were also taken to improve the quality of education and to make the programs more appropriate to the needs of the country - in this regard, specific mention is made of the SSCEP project. Similarly, it was during this period that measures were taken by the Curriculum Unit to diversify the school syllabus as well as improve school broadcasts to enrich the teaching-learning process. The planning and expansion of secondary education was a more contentious issue. The NPO counselled, through its various National Manpower Assessment projections, reduced expansion so as not to exacerbate youth unemployment, while provinces attempted to meet the educational demand of the public for increased access at this level. An effort to balance the perceived social needs with the private demand resulted in a compromise of sorts with the Education III project which sought to improve quantitatively and qualitatively the secondary system.

Since the removal of secondary courses in technical colleges, technical education has gone from being a technical high school system to a truly post-secondary technical education system. The Technical Education Project has re-equipped the colleges to a high standard, it has increased the number of nationals being trained as technical teachers and it has considerably improved curriculum development to revive existing courses. For the future it will need to concentrate on improving the quality of training, and to achieve this in the face of continuing budget cuts, perhaps reduce the numbers being trained.

Non-formal education (NFE) has been the reponsibility of too many Departments for too long and, without proper management and coordination, has gone nowhere. Despite considerable appropriations of finance by the Government, albeit spread thinly to too many organizations, there remains considerable frustration at the lack of progress. Although some success has been experienced mainly in the integrated projects of Southern Highland and Enga/West Sepik, it is little comfort to the large proportion of the rural adult population who never made it to school or who were forced out early. Part of the problem is with the lack of leadership and guidance from the National Government who provide only the "lip service", but the other problem is the folly in believing that what should essentially be a decentralized function remains under the control of the bureaucrats in their highly centralized structures in the capital.

One of the most important responsibilities of the Department of Education is in the preparation of community teachers. Much has been done to improve the training of teachers since independence. Minimum standards of entry (both age and qualifications) have been set, and curriculum development has been improved to include studies relevant to rural life. But while the whole concept of community-based education remains the centre of continuous debate between politicians, educators and the public, the determination of priorities for teacher education remains in limbo. In the area of in-service training and localization, the Department has been a leader and example to the rest of the nation. The Port Moresby In-service College continues to provide full time in-service training to the teaching force, and specialized courses, both locally and overseas, are provided where needed to national officers. While the teaching force is continually hampered by the retention of teachers, it is also true that many of these teachers have been highly successful in their new endeavours, and thus continue to contribute to the development of the nation, albeit in another area.

In terms of administrative developments it was pointed out that since 1970 there has been a progressive attempt at educational planning through the elaboration of the 1976-80 Education Plan and its review. But since the introduction of the NPEP in 1978 educational planning, particularly at the national level, has become integrated into the overall national planning process. In this respect, some of the onus of responsibility for educational planning has been displaced from Department of Education personnel to NPO and Department of Finance officers, and this has been significant in planning and gaining approval for major externally funded projects which reflect the government's priorities.

Chapter VI

SOURCES AND PURPOSES OF EXTERNAL AID

In the previous chapter, the educational developments which took place during the decade under review were enumerated. This chapter will now turn to an examination of government expenditures on education together with the external resources which provided assistance to the local effort. The first section provides a brief explanation of the complexities in the allocations of finance for education in PNG. The second section provides a summary of trends in educational expenditures over the last decade. The last section identifies the major sources of external assistance as well as the purposes for which aid was provided.

Control and Complexities of Educational Finance

As explained previously, under the Organic Law, educational responsibilities in any one area can be either wholly national, wholly provincial or joint. For those activities or institutions which come under the jurisdiction of the national Department of Education, the matter of finance allocations and control is very straight forward. Finance is appropriated as a separate item for the national Department, in the national budget. For example, this occurs in the areas of teacher education, curriculum development, examinations, school inspectors etc.

With respect to provincial allocations, the situation is a little more complex for there are three sources of finance which can be used to fund their educational activities. For the first time, under the Organic Law, provinces were permitted to raise their own revenues. Head taxes, entertainment taxes and retail sales taxes now came under their jurisdiction. In addition, provinces would be paid, by the national government, a proportion (1.25%) of export receipts and a share of the royalties from any of their natural resources. However, with the exception of the North Solomons and East New Britain provinces, Bray (1984:65) reports that this source, whilst significant, was meagre, providing only 0.4 to 6.6% of their totals.

A second source of funds came from the national government which, at the time of decentralization, gave a commitment to provinces that "subject to availability of funds, it would guarantee finance to permit provinces to maintain, at their 1976/77 levels, the services for which they took over responsibility" (Bray, 1984:77). This was done through a complex formula and resulted in the Vote 248 funds for all provinces. After 1982, these funds were referred to as minimum unconditional grants (MUG), and were allocated to fully autonomous provinces [20] to organize expenditures on provincial functions as they pleased. However, in the case of non-autonomous provinces, it remained essentially tied to various activities, one of which was education.

The above two sources of finance were used by provincial authorities to maintain educational services at their existing levels, and in effect, were seen as a type of recurrent expenditure. The third source in the financial structure, and probably more important than either of the first two, were allocations made through the NPEP. This is because through NPEP submissions provincial (or national) departments of education were able to nominate and direct priority areas for future growth through their project proposals. But even in this area, the national government still exercises control in that final approval on provision of funds for NPEP proposals rests with it.

Bray (1984:76) cites Crawley (1982) and Hinchliffe (1980) as those who suggest that the financial structure, adopted at the time of decentralization, has been a strong force working against the goal of equalization of education provision amongst provinces.

---

[20] In 1980, East New Britain, North Solomons, New Ireland and Eastern Highlands. The following year Morobe, East Sepik and West New Britain were included. In 1983, Madang was added.

These writers suggest that the formulae for determining MUG allocations has been incorrectly applied and that the inequalities between provinces which existed before 1977/78 have only been exacerbated. In addition, Hinchliffe (1980:83) says that there has been confusion between levels of educational service and costs. He suggests that those provinces who had a large expatriate teaching force prior to 1977 were now able, through progressive localization, to reduce costs through lower wages, and thus provide a higher level of service.

The final point to be made here, and one that has been made previously, is that because of PNG's aid policies, provinces are not permitted to raise revenue through foreign borrowing. In an effort to encourage fiscal responsibility amongst provinces, the national government, through the Organic Law, maintains tight control on borrowing. Although the Government in certain circumstances has shown a willingness to enter into loan agreements with international lending agencies on behalf of provinces, it does so infrequently. This policy also applies to foreign aid, in that donors are expected to deal with the national government rather than directly with provinces. In a young developing nation as PNG the reasons for this must be obvious. The first, and probably most important reason being that as a nation, PNG is anxious to maintain her fiscal credibility internationally. Secondly, it would not be in the national interest to have provinces selling or mortgaging away the nation's natural resources. Finally, national unity would not be enhanced if open competition were to develop between provinces for loans or external aid.

It may, therefore, be concluded that control over educational expenditure has rested with the national government. Although provincial authorities have acted unimpeded when using their own locally generated revenue, this was, in most cases, extremely small and limited. Also, despite the nationally provided MUG's being unconditional finance, they were considered relatively inflexible because they were usually disbursed by provinces on activities essential to maintaining current level of services. Although NPEP projects provided greater freedom for provinces, in essence, their control over these funds was really only nominal because, as has been pointed out, the national government retained the whip hand in that it could choose not to fund a provincially desired project or withdraw funds at any time. External borrowing or external aid could not be considered as a revenue source by provinces, since its use was tightly controlled and generally limited by the national government. But as we shall see, external aid finance negotiated by the national government, has been used to benefit the provinces through several integrated projects.

Expenditures in Education 1975 - 1985

In the previous chapter it was shown that considerable educational developments have taken place in the decade since independence. Improved access at both the community and secondary levels was an important goal during this period. But progress was also made to generally improve and enrich the teaching-learning processes at both these levels, and considerable efforts have been made to further improve and re-direct technical education. It has also been noted that considerable success was achieved in the localization process at all levels, and since decentralization, the training of citizens has become an even greater priority than before. All of these endeavours have required a considerable increase in the government's budget.

This section,will seek to examine figures showing actual expenditures in functions which are the responsibility of the Department of Education (where possible, both national and provincial)[21] since they perhaps provide a more accurate picture of intent, than do allocations. It can be seen from Table 7 that the government expended on education approximately $8.8 million Australian dollars during fiscal 1965-66. A decade later, at the granting of independence (1975), education expenditures had ballooned over

---

[21] While it is acknowledged that other government departments and the universities are considered a part of the education sector, these will not be examined because they are outside the scope of this study.

Table 7

Government Expenditures on Education

YEAR	NATIONAL Vote 209	PROVINCIAL Vote 248/MUG	CAPITAL WKS	TOTAL EDUC EXPENDIT	GRAND TOTAL GOVT EXPEN	EDUC TOTAL IN %	
65-66	6.89 (a)	-	1.84	8.83			
74-75	38.12	–	2.23	40.35	400.29	10.10	
75-76	44.44	–	3.40	47.84	428.97	11.15	
77	–	–	–	–	–	–	
78	21.69	35.49	2.18	59.36	493.23	12.03	
79	23.32	38.25	1.77	63.34	560.40	11.30	(a)
80	28.03	44.78	1.22	74.03	634.97	11.66	[14.8]
81	31.57	52.43	1.92	85.92	688.92	12.47	[15.7]
82	34.01	58.02	1.94	93.97	707.07	13.29	[16.6]
83	36.64	68.09	3.77	108.5	784.69	13.82	[17.1]
84	35.37	75.93	4.01	115.31	822.86	14.00	[17.3]

Source: [1] PNG Annual Public Accounts, various years; and
[2] PNG Department of Provincial Affairs.

Note: (a) These figures include Universities; it can be seen with their inclusion, the proportion expended on education as a percentage of total government expenditures rises substantially.

(b) Caution is required regarding the Provincial figures in this table. Dept of Provincial Affairs could provide accurate figures expended on education for only some provinces. For the remainder, best estimates were made.

6

400% to K47.84 million PNG kina.[22] Once again, a decade later (1984), education expenditures had increased another 140% to K115.31 million kina. Although some of this increase can be attributed to inflation caused by the world oil crisis in 1972, there is sufficient evidence to show that it was also a deliberate attempt by the government to increase education's share of the nation's resources so that development activities were possible. From Table 7 it can be seen that education's share of total government resources has continued to rise consistently each year. The table also illustrates the burgeoning amount of finance that provinces have available (mostly through grants) and are prepared to spend on education (i.e., 66% of total educational expenditures). It is estimated from the various expenditures figures available for education that in 1985, approximately 24% of total expenditures for the Department was allocated to development activities as distinct from recurrent activities.

It can be seen from Table 8 that in 1985 a large proportion of educational expenditures continued to be spent on personal emoluments (salaries, recreational leave, allowances, etc.) for the workforce of the sector. This was particularly burdensome for the Department at a time when expatriates constituted a large part of the educational bureaucracy, secondary and post-secondary teaching forces. However, despite the tremendous strides which have been made in the localization process since independence and the resultant reduction in costs, salaries still continued to be the area of greatest expense. Part of this may be explained by the fact that although salaries for local teachers are low in comparison to contract expatriate teachers working in the country, they are still considered high relative to teachers in other developing countries of the region. The item 8 (grants and subsidies) listed as receiving 34% of expenditures refers primarily to the operation of the Commission for Higher Education and post-secondary scholarships paid

---

[22] At this time 1 PNG Kina = 1 Australian dollar

Table 8

Expenditure of Department of Education by Expense Items
1985

Expense Items	Expenditures	% Total
1. Personal Emoluments	16,900,000	37.8
2. Travel and Subsistence	1,660,000	3.7
3. Utilities	1,187,900	2.7
4. Materials and Supply	2,882,200	6.4
5. Transport	600,100	1.3
6. Special services	697,700	1.6
7. Capital Assets	2,742,500	6.1
8. Grants and Subsidies	15,258,400	34.1
9. Other	837,700	1.9
10. Personal Emol. (other)	1,300,700	2.9
17. Buildings	360,000	0.8
18. Housing	266,000	0.6
19. Replacement Furniture	56,000	0.1
TOTAL	K 44,749,200	100.0

Source: Planning and Budget Strategy 1987. Budget Document No.1, PNG MInistry of Finance and Planning to students as bursaries, as well as to grants paid to provinces under the various sectoral programmes.

Table 9 clearly shows that in 1978 community and secondary education were the top priority areas (receiving 46.2%) in education expenditures, and this trend has continued in the years since. Also due to a large aid assisted project commencing in 1982 for the upgrading of technical colleges, this particular level of funding would have increased from the listed 5.0% in 1978 to a portion considerably higher. By aggregating all post-secondary expenditures (i.e., technical colleges, teachers' colleges, specialized training institutions, universities, scholarships), which comes to 44.1% of the total of education expenditures, one can see the high priority the government allocated to this level of education at the time and the high cost of training relative to those graduating from these institutions. This trend has continued throughout the first half of the 1980s with the two public universities receiving on average an 8.8% increase in expenditures per year. But with the introduction of the new Medium Term Development Strategy in 1985, the priorities determined by the government for education were, in priority order, community schools, non-formal, high schools and tertiary respectively. For tertiary education (particularly the universities), this meant that in 1986, they began to experience cuts in their appropriations to allow community education to be funded at a level determined by the government.

But perhaps the biggest surprise comes from the level of funding of non-formal education. Despite the impressive increases shown in enrollment and the attempts at qualitative improvements in the formal system, the Education Sector Committee[23] (1984:4) noted that the formal education system does not serve two-thirds of adults who are illiterate, or 28% of children who do not start community school, or 54% of children who do not finish school, or 84% who do not attend provincial high schools, or the 95%

---

[23] formed in 1984 to advise and recommend government planning for the Medium Term Development Strategy.

Table 9

Public Recurrent Expenditure on Education,
By Level and Type - 1978

(K '000)

Level/Type	Expenditure	% Total
Community Education	40,731.1	46.2
Provincial High Schools		
National High Schools	1,462.9	1.7
Technical Colleges	4,392.9	5.0
Teachers' Colleges	2,360.8	2.7
Scholarships (a)	2,682.0	3.0
Non-Formal Education	281.8	0.3
International Schools	1,610.7	1.8
Policy, Administration & Services	5,176.1	5.9
Specialized Training Institutions	13,821.0	15.7
Universities	15,599.8	17.7
TOTAL	88,119.1	100.0

Source: Papua New Guinea, Basic Education for Rural
Development. 1979:115

Notes: (a) does not include Teacher Education of people who do not receive some form of higher education. So, with the Government's alleged commitment to improvements in rural welfare and its concern for non-formal education, it is difficult to comprehend non-formal expenditures being less than one half of one per cent of the Department's total expenditures as they were in 1978 (see Table 9). Unfortunately, it would appear that the situation has not really improved much since then, even though the Medium Term Development Strategy has made it a second priority in funding, and the national Department has been responsible for management of the Non-formal Education Sectoral Programme. This Programme was only funded to PNG K405,000 annually (for about three years), and since this was only approximately 1% of the national Department's total expenditures in 1985, could not really be expected to have had much impact.

Another area in which significant expense has been incurred is through capital works. This is particularly evident in the provision of increased opportunities for secondary schooling where a new high school can be expensive as PNG K1.0 million to construct, although government financing of these varies among 100%, 75% or 50%. Between 1975 -1985 approximately 35 new high schools have commenced operations. By way of contrast, primary school construction is not supported directly by provincial governments and those village communities requesting a school are expected to finance its construction as well as provide teacher accommodation. Capital costs have also been incurred to provide additional places at the secondary teachers' college at Goroka (K0.9 m), at the teachers' college in Madang (K0.5 m), and at the technical college in Lae (K1.1 m). At a later date, new development projects also provided capital outlays to equip and upgrade existing facilities at all technical colleges, to improve existing and provide new facilities and equipment for the Inservice College in Port Moresby, and to construct a new Curriculum Development Centre, printshop and broadcast facilities for the national Department of Education.

But it is important to point out that the increases in educational expenditures over the past decade were not just limited to the area of quantitative expansion and capital works. The government had also given a firm commitment to attacking the perceived decline in educational standards and so a generous allocation of expenditures went to improving the quality of education at all levels through curricular reforms, textbook development, inservice training to upgrade teacher qualifications, improvements in teacher training approaches and methods and the training of both national and provincial educational administrators. As will be seen in the following sections, it is in these areas that the local effort was complemented by external funds to accomplish some of these developments.

Major Sources of External Assistance 1975-1985

As noted in earlier chapters of this study, the Australian government has provided a substantial proportion of grant aid in support of the PNG national budget. But because of the unconditional nature, for the most part, of this aid it is impossible to estimate or even show a relationship between it and the development of education during the period in question.[24] For this reason, Australia 's role in the development of education cannot be discussed or even quantitatively described.

Major external aid assistance to the development of education in PNG, unlike many other developing countries and notwithstanding Australia, has not come from bilateral sources. Whilst it is true that PNG values its bilateral sources of aid, their contributions in the area of education have been minor. Perhaps the reason for this lies in the PNG Government's insistence, particularly in the past, on not damaging its special relationship with its former colonial power. But whatever the reasons, it has meant that PNG has relied almost entirely on its external aid from two of the large multicapital assistance agencies, namely the World Bank Group and the Asian Development Bank.

---

[24] the exception being fellowship training provided to technical teachers (about 10 per year) and other teachers (about 7 per year) under the PATCOP technical assistance programme.

These two organizations jointly with the national government have provided the finance with which to fund the major development projects in the decade since independence.

The World Bank Group

The World Bank, formally known as the International Bank for Reconstruction and Development (IBRD), was set up in 1945 to assist in the reconstruction and development of member countries by facilitating the investment of capital for productive purposes. Its financial resources come from the capital subscriptions of its 148 country membership, and is supplemented by medium and long term borrowings in the world's capital markets. Voting power in the Bank is determined by members' subscriptions to capital stock. In 1985 the largest contributor, by far, was U.S.A. (19.7%), followed by Japan (6.56%), U.K. (5.69%), and Germany (5.52%) . PNG's contribution gave it 0.08% share of voting rights.[25]

The International Development Association (IDA) was set up in 1960 to provide development finance on concessional terms (which bears less heavily on balance of payments) to the poorest of its members. The funds provided are called *credits* to distinguish them from the IBRD loans, and terms are typically at no interest (although 0.75% annual service fee is charged on the undisbursed portion), a 10 year grace period, and 50 year maturity. Only the poorest countries are eligible for this funding and the criterion used in 1987 is an annual per capita GNP of less than US$760. Prior to 1984, PNG qualified for this type of funding; currently, it does not.

There is sometimes confusion about the IBRD and IDA as organizations. The fact is that they are one and the same organization, with a single management structure, staff (employs about 6,000 staff from over one hundred different countries), and administrative and physical infrastructure. The only difference between the two is the manner in which the IDA is funded (by the richer member countries) and who has access to its resources. In assessing the viability of a country's project proposal the methods used are identical and not dependent on whether funding will ultimately come from IBRD or IDA sources.

---

[25] World Bank Annual Report (1985:200)

Prior to 1963, the Bank did not lend money for education. However, this stance changed and, in September 1962, it made known its basic global educational policy by stating that the

> Bank and IDA should be prepared to consider financing a part of the capital requirements of priority education projects designed to produce, or to serve as a necessary step in producing trained manpower of the kinds and in the numbers needed to forward (capitalist) economic development in the member country concerned and should concentrate attention, at least at the present stage, on projects in the fields of a. vocational and technical education and training at various levels, and b. general secondary education. Other kinds of education projects would be considered only in exceptional circumstances. (World Bank,1979:1)

But, doubts about how suitable education was as an object for lending continued to exist within the Bank. For example, Romain (1985:1) reports

> Primary education in particular was considered to be a consumption rather than investment, unlimited in its demands and not directly productive. The Bank and other agencies felt that, at the very least, the countries should take care of their primary subsector out of their own resources.

But after considerable input by UNESCO, the Bank did acknowledge that the primary education system in many developing countries was inadequate to provide a proper basis for the development of other aspects of the national educational plans. Of the 264 education projects in the period 1963-83, 68 projects (or 14%) were for primary education and cost US$1.4 billion.[26]

The first suggestion of involving the World Bank in PNG came in 1953 from a committee set up by the Australian Minister for Territories, Paul Hasluck, to advise on economic development of the two Territories (Hasluck,1976:141). But it was not until December 1960 that Hasluck, after reading the Bank's development reports on Nigeria and Thailand, formally requested that steps be taken by the Australian government to invite the World Bank to undertake a broad examination of the Territory's economy. Unfortunately, the World Bank was not able to commence its work until 1962, but its 1964 report was to have an important impact on future economic development for the territory.

---

[26] Romaine (1985:i)

Discussions for the first Loan/Credit to education in PNG came as a result of a request by the Australian Government in 1970. After many false starts, it finally commenced in 1976. It was an integrated project in the sense that apart from the Department of Education, it also embraced other government departments. At the insistence of the PNG Government the project was implemented and managed from within the Department of Finance, a fact that was later to prove unsatisfactory to the Department of Education. Subsequent Loans/Credits to education were managed by the Department of Education itself.

Asian Development Bank

The Asian Development Bank (ADB) is an international development finance institution which was set up in December 1966 to promote the economic and social progress of its member countries in the Asia-Pacific region. Its financial resources come from the capital subscriptions of its 45 country membership (31 countries from Asia-Pacific, and 14 from Europe and North America), as well as borrowed funds from the capital markets of Europe, Japan, the Middle East and the United States.

It is similar to the World Bank in that it generally provides loans to member countries which have attained a higher level of economic development.[27] Loans from

---

[27] which in 1984 accounted for 69% of the Bank's lending

"Special Funds" are made almost exclusively to the poorest countries of the region on concessional terms. Up to 1983 PNG continued to qualify for these special funds.

The ADB's operations, like the World Bank (but on a much smaller scale), cover the entire spectrum of economic development, with particular emphasis on agriculture, rural development, energy and social infrastructure. With regard to the education sector, the ADB has shown particular interest in vocational and technical training as well as curriculum and administrative reforms. In addition, it provides considerable technical assistance for the identification and planning of major development projects.

The first educational assistance to PNG from the ADB was in December 1974 when the first planning for the East Sepik Rural Development Project took place. Although this project was initially to be a series of agricultural-type components under the management of the Department of Primary Industry (DPI), at the last minute, in order to make it more "integrated" the Department of Education was invited to participate. The project was managed from Port Moresby by the Department of Finance, with a resident manager (seconded from DPI) based in the province. The next loan for education from the ADB did not come until 1982. It was designed to improve technical education.

United Nations Development Programme (UNDP)

The UNDP was set up in 1965 through the merger of the United Nation's (U.N.) Expanded Programme of Technical Assistance (1949) and the U.N.Special Fund (1959). It is the central channel for technical assistance provided through the U.N. system. Projects are very diversified, but all share the common aim of fuller and better utilization of natural resources and of human talent and energies. UNDP's resources are raised through voluntary contributions made by every member country of the U.N. and its agencies. The Governing Council of the UNDP allocates assistance to developing countries based on a formula which emphasizes population and per capita GNP. Plans or proposals for UNDP support are encouraged to be submitted as "country programmes" and fit into the national development plans to ensure acceptance. UNDP's assistance to PNG is on grant terms and in the form of technical assistance outside the budget.

The first use of UNDP funds for educational projects commenced in 1968 and began with technical assistance of 13 experts for the strengthening of teacher education and curriculum. This project, PAP/66/501, implemented by UNESCO, was revised three times in the form of a new project (PNG/73/019) negotiated in 1973 and completed in 1981.[28] Specifically, this project sought to assist the Department in writing, trialling and evaluating both primary and secondary mathematics curriculum. In its formative years it had been responsible for establishing the Department's Printshop (initially at Goroka Teachers' College but later transferred to Idubada). For the period 1975-81, UNDP provided US$1.4 million, whilst the PNG government contributed US$1.72 million.

UNESCO

UNESCO came into existence in 1946 as a specialized U.N. agency, with the object of promoting cooperation in the fields of education, science and culture. In 1985 it had 140+ member states and 2,000 professional staff.

The PNG National Commission for UNESCO located within the Department of Education was approved in 1981 and officially commenced in 1983. Since UNESCO resources have relatively limited opportunity cost to PNG (compared to say, UNDP), every effort has been made by PNG government to utilize these resources before resorting to UNDP. However, in the past it has been PNG's experience that it is difficult to get significant funding from UNESCO to mount a major programme, and so in this respect either UNDP, World Bank or ADB has had to be tapped.

For the 1981/83 trienium, ten projects were funded under the Participation Programme, the total cost being US$65,494. For the past seven years an average of 30 nationals (in 1984, 48 went) are sent overseas to attend courses sponsored by UNESCO. In addition, there were 6 training workshops (either partly or wholly sponsored by UNESCO) held to provide skills in specialized areas. Also, a moderate amount of funding is provided each year to support small-scale projects (i.e., in 1984, 4 projects shared US$3,675). Since the grants quoted only illustrate an aggregate amount, the conclusion should be that education's share is small.

---

[28] Papua New Guinea (1980:30)

Some suggest that perhaps the most significant contribution to PNG may come from UNESCO consultants who are regularly used by the World Bank as advisors in the identification, appraisal and evaluation stages of major development projects. This issue will be discussed later.

European Economic Community

The European Economic Community (EEC) are a collection of European states joined together to establish close community ties with each other and to ensure economic and social progress through common action.

In the area of foreign trade and aid, the EEC has entered into collective pacts with an increasing number of African, Caribbean and Pacific countries. The first agreement was signed in 1975 in the capital of the West African State of Togo, and is commonly referred to as Lome I, covered the period 1976-1980. Assistance provided for various projects under this Agreement totalled approximately K61,000.

Lome II, signed in 1979, covers the period 1981-86. Under this programme, PNG successfully negotiated a K10.0 million (approx) package. The area of interest to education was the overseas and in-country training, which was provided an allocation of K400,000. This has been used to provide overseas scholarships and training awards in member countries. This training scheme is coordinated by the Department of Personnel Management through the resident EEC Delegation in Port Moresby.

Bilateral Aid to Education

Bilateral aid to education is relatively small when compared to the major projects funded with the assistance of the multicapital international lending agencies. One of the more prominent countries, New Zealand, was strongly supportive of the PNG Government's Non-formal Education Sectoral Programme between 1982-85. The Japanese Government has instituted a Japanese Teaching Programme at Sogeri National High School, providing two teachers and materials and teaching aids. In 1979 the German Government gave tax support to a German non-governmental organization, Hanns Seidal Foundation of Bavaria, which provided a grant of PNG K1.7 million to an East New Britain high school so that it could incorporate technical skill training for rural situations with its normal school programme. In addition to these, the UK Government through the British Council has provided many scholarships and fellowships for teachers and administrators for study abroad. Also, since before self government the Volunteer Service Overseas (VSO) organization has provided volunteers to teach in secondary schools and to assist various self-help projects. Canada's contribution to education has followed a similar pattern in that it too has provided volunteer teachers for high schools from its Canadian University Services Overseas (CUSO) agency, as well as providing a limited number of post-graduate scholarships (to Canadian universities) and training through their Canadian International Development Agency (CIDA).

The Major Aid Projects 1975-85

The most prominent external support to education has come from two multilateral aid agencies: The World Bank Group, and the Asian Development Bank. Since 1976, these two agencies have provided capital to assist the mounting of 6 important development projects in education (See Table 10). The following, provides a brief descriptive overview of each of these projects.

Table 10

Major Educational Projects Assisted by External Aid
1975 - 1985

Project Name	Commenced	Completed	Aid Agency	Costs	Management
Education I	1976	1981	World Bank	World Bank Credit US$4.0m	Dept. Finance
East Sepik Rural Develop.Project	1976	1983	A.D.B.	ADB Special Funds US$7.65m	Dept. Finance
Southern Highlands Rural Dev.Project	1978	1983	World Bank	World Bank Credit US20.0m PNG Government US12.2m	Dept. Finance
Education II	1981	1988	World Bank	World Bank Credit US$12.0m World Bank Loan US$6.0m PNG Government US$19.6m	Dept. Education
Technical Education Project	1982	1987	A.D.B.	ADB Special Funds US$8.0m ADB Loan US$8.0m OPEC Loan US$4.0m PNG Government US$13.0m	Dept. Education
Education III Project	1984	1988	World Bank	World Bank Loan US$49.3m PNG Government US$26.4m PNG Church Agencies US$2.7m	Dept. Education

1. Education I Project

Discussions for this project commenced between Australia, PNG Department of Education and the World Bank in 1970 and initially favoured technical education. However, matters stalled internally for several reasons: government's reluctance to borrow for social services, failure to produce a national plan for education, imminence of self-government and independence. The PNG Government revived the project in 1975 and due to the changed priorities of the time, and considerable Bank input, the project was to address various educational shortcomings and assist training. Project Costs (See Table 11) totalled approximately US$6.6 million with aid assistance contributing a 61% share.

Project aims were to:(i) provide urgently needed training facilities for a variety of middle level skill requirements (agricultural, medical, pedagogical and technical); and(ii) technical assistance for institutions and for studies regarded as essential for the future development of education and training in PNG.

Educational components:

(a) Madang Teachers' College - Upgrading of physical facilities (new students dormitories, staff housing) was intended to increase enrollments and result in two-thirds of the student residential accommodation being made available for women. In addition the provision of a new library, equipment and books sought to stimulate qualitative improvements in the training programme.

(b) Goroka Teachers' College - upgrading of physical facilities (new dormitories, staff housing) would increase enrollments and permit the introduction of a one year conversion course (to secondary) for community school teachers which would permit the replacement of expatriate teachers and reduce unit costs. Other facilities (new audio-visual theatre, and minor upgrading would generally enhance the quality of the programs and provide the college with university -quality facilities.

Table 11

Education I Project
Comparative Analysis of Expenditures
(in PNG Kina '000)

Project Items	Civil Works & Materials	Equipment	Professional Services	Technical Assistance	Total
Dept Primary Industry					
- HATI	561	36	11	-	608
Dept of Public Health					
- Coll Allied Health Science	526	69	10	182	787
Dept of Education (DOE)					
- Rural Vocational Centres	-	112	-	99	211
- Madang T.T.Coll	426	56	8	-	490
- Goroka T.Coll	889	155	29	-	1,073
- Lae Technical Coll	527	500	10	244	1,281
Sub-Total DOE	1,705	823	47	343	3,055
Technical Assistance					
- Policy & Planning (DOE)				88	88
- National Training Council (Dept Labour)				12	12
- Integrat.Rural Devel. & Community Training				39	39
- Miscellaneous				144	144
TOTAL	2,929	928	68	808	4,733
Project Administration					174
Project Costs	2,929	928	68	808	4,907
	US$3.93	US$0.093	US$0.07	US$1.08	US$6.57

Source: PNG Department of Education

Note: slight discepancies exist due to use of average exchange rates

(c) Lae Technical College - increase the overall capacity of the college by about 53% and increase the output of technicians, and relocate the building courses to Lae. Towards these ends, physical facilities such as workshops and laboratories were built or upgraded, library was upgraded and considerable equipment and books were purchased. Nine man years of specialist services in civil, electrical and mechanical engineering as well as building were supplied to revise syllabi.

(d) Village Development Centres - this component was an experimental project in non-formal education which attempted to reorientate 5 vocational schools to provide village-based training by instructors providing training in the village setting.

(e) Planning Personnel - two man years of technical assistance were provided to assist the Department in planning, particularly with the mid-term review of the national Education Plan 1975-1980.

2. East Sepik Rural Development Project

As explained previously, the educational component of this project was an afterthought in an attempt by the original planners to make it more integrated. Unlike the remainder of the project, the education subproject was planned by the Department of Education and not by consultants. Not long after its commencement in 1977 provincial governments were created, and with the transfer of considerable educational responsibilities to them, this affected the project's future direction and management. At the completion of the project in 1983, the provincial government decided to retain elements of the project as part of an NPEP funded project. The total cost of the project was US$11.3 million with the educational component costing almost US$1.0 million (See Table 12).

Education Subproject aims were to improve the general well-being of students and in particular the communities of the province, and to provide them with the necessary skills and knowledge to help improve village life. This was to be achieved by

Table 12

East Sepik Rural Development Project
Comparative Analysis of Expenditures
(in US $ '000)

Sub-Project	Foreign Exchange Component	Local Exchange Component	Total Project Cost
Gavien Land Settlement	2,867.9	876.1	3,744.0
Buffalo Farming	914.1	101.0	1,015.1
Inland Fisheries	471.6	347.8	819.4
Crop Intensification	239.5	201.3	440.8
Agriculture Research	510.3	357.7	868.0
Schools Agriculture and Nutrition Education	678.7	258.9	937.6
Agriculture College	1,170.3	1,218.4	2,388.7
Project Management	69.5	289.3	358.8
Consultancies and Fellshps	584.7		584.7
Mid-term Review	144.1		144.1
Total	7,650.7	3,650.5	11,301.2

Source: PNG Department of Education

(a) developing an integrated curriculum which led towards-improved self sufficiency in agriculture, better utilization of land and better nutrition and health. .

(b) developing practical working skills and experience to promote the concept of self-help.

Educational Components:

Village Development Centres - vocational centres were renamed village development centres by the provincial government and were intended to promote village development throughout the province by closer liaison with the communities in which they were located. The centres were provided with facilities to cover the needs of self sufficiency in agriculture, improved nutrition and health and for the development of appropriate technology

Community Schools - community teachers were given in-service training in improved methods of agriculture, nutrition and health. These "project teachers" would then be supported in their schools by regular visits from project consultants, nutrition sheds were built, and gardening tools supplied to all "project " schools. In those schools where there was an annual shortage of water, low-cost water facilities were supplied. Pressure was placed on the resources of the project when the provincial government extended the project to all community schools. Important achievements for the project were the development of curriculum materials for community schools which could have been used as resource materials for schools in other provinces. Unfortunately this transfer of information and ideas has not been apparent.

High schools - the project was to include the five provincial high schools and one national high school. It was envisaged that the project would lead to improvements in the high school curriculum in agriculture, with a possibility of leading to better integration with other subjects (home economics, practical skills). Nutrition buildings were built and farming tools distributed to the high schools.

Inservice and Preservice Training - a new inservice training centre was constructed at Gavien (a rural location) in 1982 and inservice sessions as well as refresher courses held for teachers, principals and inspectors. In addition, preservice courses were conducted at the local teachers' college in agriculture and nutrition prior to graduation.

Consultant Services - three consultants (or 6 man years of services) were provided by the project (the Department funded an extra person to initiate and run the inservice function) to give expert advice on nutrition, agriculture and motor mechanics (fixing small machines, outboards etc.). It was anticipated that they would have considerable input in the revision and development of new curriculum for the three levels of education in the province.

Fellowships - two overseas fellowships were provided for the national counterparts of two of the consultants. The remaining national counterpart visited several countries of the south Pacific to observe extension training methods.

3. Southern Highlands Rural Development Project

The southern highlands region has had a relatively short exposure, thirty years, to outside influences. Malnutrition among children was considered a serious problem as was an adequate water supply to various areas. The people were largely illiterate and unfamiliar and unaffected by the dramatic economic and social changes taking part in the rest of the country. Educationally it was a disadvantaged province.

Educational Components:

There were two components to the education subproject: The first was for the formal sector which sought to expand secondary enrollments so as to equalize opportunities for southern highlands youth. This was accomplished by the construction and equipping of Koroba (1979) and Pangia (1981) high schools. In addition various gardening tools and cooking utensils were provided to all provincial schools to assist with better nutrition and improved subsistence gardening. The purpose of the non-formal component was to cooperate with other provincial departments to develop adult, community-based education programmes that emphasized agriculture, nutrition and literacy in the context of village development. To assist this latter component technical assistance provided for a coordinator, and an agricultural lecturer for the community teachers' college. In addition the project supplied salaries for two district nonformal education officers and a large number of village "motivators". Considerable effort was expended on extension work to reach youth groups, womens' groups and provide literacy and leadership training in village communities. The new structure the provincial government had created provided improvements for integration of the work of all existing extension agencies.

7

4. Education II Project

With the assistance of a joint World Bank/UNESCO mission in 1979, components were identified and presented to the Department. This was further improved and refined by the Department and presented as a detailed proposal to Government and later to the World Bank. The project focused upon the needs and problems of community education as well as effective management of education at the provincial level. It was the first externally-aided project managed by the Department of Education. The World Bank financed approximately 48% of project expenditures by providing a US$12.0 million credit and a loan of US$6.0 million (See Table 13).

Project aims were to (a) promote greater access to primary education by assistance to the provinces to expand existing schools and establish new schools and to reduce pupil shortage; (b) raise the quality of primary education through the production of improved textbooks, materials and teacher training; and (c) enhance the capabilities for effective management of education particularly at provincial planning level.

Table 13

Education II Project
Comparative Analysis of Costs by Item at Appraisal
(in US$ '000)

Project Item	Foreign Exchange Component	Local Exchange Component	Total
Administration Training	800	400	1,200
Curriculum Development	4,100	1,400	5,400
Teacher Training	1,400	900	2,300
Provincial Primary Education	6,200	14,500	20,700
Staff Housing	200	400	600
Preparation of Future Projects	200	-	200
Management and Evaluation	1,600	200	1,800
Sub Total	14500	17,700	32,200
Contingencies	3,500	1,800	5,400
Total Project Costs	18000	19,600	37,700

Source: PNG Department of Education
Note: additions in this table may not agree with totals due to roundings

Since this was a large and complex project, it was divided into many separate subprojects: Provincial Planners & Administrators - to promote effective administration by improving skills of educational personnel at both provincial and national levels. Four consultants were employed to run planning courses and provide on the job training. The anticipated result was the production of a provincial education plan by each province. Fellowship training for 52 man-years were provided for both local and overseas venues.

Measurement Services Unit - strengthen and further develop the role of the examinations section, so that it can effectively monitor standards of individuals and institutions in all subjects. Purchase of computer equipment and construction of new facilities. Technical assistance of 3 man-years each for two consultants in tests and measurements. Training fellowships overseas for two national associates.

Training for Teachers' College Lecturers - to improve localization and staff development for both pre-service and inservice national staff. One consultant in staff development (6 man-years) and provision of 75 man-years for both local and overseas training.

Writing Fellows - to provide experienced national officers with training in writing curriculum and support materials. Provides 14 man-years of fellowship training.

Textbook Production - provides 3 consultants, for a total of 9 man-years, to write, trial and produce textbooks for Community Life, Mathematics and Health for Grades 4-6. In addition it provided a consultant editor as well as fellowship training in this area.

Resource Centres - to assist provinces with the establishment of resource centres.

Library Assistance - the need for expert assistance on the planning and development of school libraries and the training of school library advisors.

Civil works - (i) improve the facilities of the Inservice College by renovation, construct a new library, and provide additional equipment and furniture, (ii) construct and equip a new printshop and curriculum development centre so that there can be better integration of the whole educational materials development process, and (iii) construct and equip new audio-visual facilities to facilitate and improve school broadcast capabilities.

Provincial Primary Education Fund - is a special NPEP funded project which was designed to provide finance to provinces for 3 years (1981-83) to address constraints to enrollment expansion and improvement of quality in primary schools.

Project Evaluation - the original intention was to provide consultant services for four evaluators to provide on-going evaluation of the project. The scope of the Unit has since been enlarged to include subsequent aid-assisted projects and other activities as required. In addition, fellowships totalling 4 man-years were provided for national counterparts.

5. Technical Education Project

In 1979 the Department had prepared plans to upgrade its technical and secretarial colleges. The ADB were invited by the PNG Government to assist in the financing of the plan and a Bank identification team arrived in PNG in May-June 1979. But by November 1980 the Department had established an inter-departmental committee to prepare a 10 year plan which would improve and expand technical education for the years ahead. This plan, and the subsequent project proposal to the ADB, was very much guided by the manpower projections of the 1979-1990 NMA produced by the National Planning Office. Total project costs were estimated to be US$33.0 million, with the PNG government providing 39% (US$13.0 million) and the remainder provided by the ADB (US$16.0 million) and OPEC (US$4.0 million). See Table 14.

Table 14

Technical Education Project
Comparative Analysis of Costs by Category, at Appraisal
(in US$ '000)

Project Category	Foreign Exchange Component	Local Exchange Component	Total
Civil Works			
(a) Tech Colleges	1,864	2,279	4,143
(b) Technical Teachers' College	552	675	1,227
(c) Dept Works & Supply (DWS)	878	1,072	1,950
Furniture/Equip (Tech Coll)	6,317	257	6,574
Furniture/Equip (DWS)	437	48	485
Consumable Materials	450	23	473
Consultant Services			
(a) Tech Colleges	3,258	2,825	6,083
(b) Technical Teachers' Coll	338	145	483
(c) DWS	315	135	450
Recurrent Costs	-	1,970	1,970
Sub-Total	14,409	9,429	23,838
Physical contingencies	1,441	943	2,384
Price Escalation	4,150	2,628	6,778
Total	20,000	13,000	33,000

Source: PNG Department of Education

Project aims included: (a) the upgrading and expansion of equipment and facilities within the existing technical and secretarial colleges in the country; (b) the establishment of a permanent technical teacher training centre; and(c) the improvement of apprenticeship conditions and training provided by Department of Works and Supply.

Project Components:

Capital works - a capital works programme at each of the technical colleges has constructed new buildings as well as upgraded existing ones. New classrooms, workshops and staff accommodation have been provided to Colleges, as well as renovating existing facilities. In an effort to formalize its technical teacher training activities, new demonstration workshops, classrooms and student and staff accommodation have been constructed and equipped at Goroka Teachers' College. In an effort to substantially improve apprenticeship training at DWS, a new Apprenticeship Training Centre at Boroko was established. Among the new facilities provided were three workshops, four classrooms, and five dormitories.

Equipment procurement - this component was principally for the upgrading of the colleges and for the new courses to be introduced, although it does include provision of equipment at the new facility at Goroka. Estimated cost for equipment was US$6.5 million.

Consulting Services - services of this nature have been provided to (a) replace national teachers who are away on training courses, (b) review and prepare equipment lists, (c) review and develop new curriculum , and (d) train local counterparts. Approximately 85 man-years of specialist services have been provided under the project as well as 8 man-years of specialist services to establish the technical teacher training facility at Goroka.

6. Education III Project

The very early beginnings of this project began in 1982 when the Department was looking into the whole question of secondary education and how best to develop and improve it given the limited resources available. A team of external consultants were commissioned to look into the needs of secondary education in the country with a view to recommending how best to achieve optimum outputs from the system given the various constraints on it. Although the report helped to stimulate some Departmental thinking, it wasn't until after a series of provincial visits to listen to their ideas and expectations, and UNESCO was again consulted, that a proposal was prepared by the national Department. After much refinement and compromise (on both sides) with the Bank it was finally approved for funding. It was the first time in a educational project with PNG, that the Bank had agreed to finance substantial recurrent costs. Total project costs were estimated to be approximately US$78.4 million, with the Bank contributing about 63% through a loan of US$49.3 million. See Table 15.

The main aim of the project was to help develop qualified national manpower at the middle and higher levels by increasing the number of Grade 10 and 12 school leavers and improving the effectiveness of secondary education. This aim would be achieved by: (i) expansion of lower and upper secondary school places and upgrading of school facilities, (ii) provision of appropriate teaching materials and upgrading of the secondary teaching force, and (iii) implementation of strengthened policies and evaluation practices.

The project can be divided into two distinct areas - new initiatives or development activities and on-going recurrent activities.

Table 15

Education III Project
Comparative Analysis of Costs by Components, at Appraisal
(in US$ '000)

Project Component	Foreign Exchange Component	Local Exchange Component	Total
A. Development of Materials and Teachers			
Materials Development	2,946.3	1,453.6	4,399.9
Teacher Training and Support	1,596.2	4,286.6	5,882.8
B. Expansion & Upgrading of Facilities			
New Provincial High Schools	14,265.1	25,173.1	39,438.2
Extension of National High Schools	550.8	1,276.3	1,827.1
Upgrading Existing Provincial & National H.S.	2,846.9	4,226.2	7,073.0
C. Planning, Evaluation and Management			
Evaluation and Monitoring	124.3	345.3	496.6
Studies	539.3	262	801.2
Project Management	214.7	200	414.7
Total Baseline Costs	23,083.5	37,223.1	60,306.5
Physical contingencies	1,870.6	2,922.3	4,792.9
Price contigencies	4,812.4	8,539.3	13,351.6
Total Project Costs	29,766.4	48,684.6	78,451.1

Source: PNG Department of Education

New Developments -

Provincial high schools - This portion provides grant-in-aid for upgrading and improving facilities at older high schools (Church schools will be expected to provide matching grants), provision of additional funds to employ extra ancillary staff to free teachers to pursue more professional responsibilities, various science kits (e.g., biology physics, chemistry etc.), one each year, will be issued to all schools. A collection of library books will also be distributed annually to schools. With the aim of improving the quality of teaching in high schools the following were introduced: (a) a post-graduate Diploma of Education to selected university graduates to entice them into a career in education, (b) opportunities for subject masters to upgrade their qualifications to degree level, (c) introduction of 2 year Advanced Diploma in Teaching for classroom practitioners to improve subject knowledge, (provide technical assistance to produce student textbooks in the core subject areas and mass produce them, (d) employ 6 extra inspectors and construct a new wing located at the site of the curriculum development centre, (e) arrange for the new high schools to be constructed under the project provide science equipment and library books.

National high schools - A capital works programme will see (i) the upgrading (K2 million), and (ii) expansion (K1.5 million) of facilities at each of the four national high schools, particularly Sogeri, the oldest. It also provides for the upgrading of national teachers by providing training opportunities at degree level (at home) and post-graduate fellowships (abroad). In addition to providing finance for extra resource materials (texts, library books) and more ancillary staff for each school, it will also finance curriculum coordinators and their activities in each of the four core subject areas.

Correspondence Education - The College of External Studies is one of the few opportunities for out-of-school youth (or adults) to gain formal qualifications. The project will construct a new College in the same location as the Curriculum Development

Centre and Inservice College (K300,000). It will also provide for overseas fellowships for six staff and the re-writing of the Commerce certificate curriculum.

Important support services were also to be supplied to assist the project. In the evaluation unit two specialist staff would provide monitoring and on-going evaluation of the project. In the Measurement Services Unit two specialist staff were to be added to support existing staff in testing and analysis of exam results.

In 1986 a team of three consultants conducted a study on the relationship between upper secondary education and higher level employment with a view to recommending appropriate expansion rates and illuminating various options for the future.

Recurrent Activities -

In this area the two major components worth enumerating are the High School Sectoral Programme-Capital works and the Recurrent Costs of the Sectoral Programme; The former was to have provided a small expansion of lower secondary so as to increase the number of grade 10 graduates. This was to be achieved by completing the 9 high schools which were under construction in 1984, completing 6 more during the life of the project, and starting 6 additional not to be completed by project end. It was envisaged that each new school would have an enrollment of about 320 students. The latter component was financing all additional expatriate teachers employed during 1979-83 and all new teachers during 1984-88 as a result of the expansion programme.

There have been, of course, other projects involving education, for which external assistance has been received. These have been negotiated and guaranteed by the national government on behalf of the provincial government. However, since these have been essentially provincially planned, controlled and managed, they fall outside the scope of this study. Most of these projects are integrated for agriculture and rural development and consist of an education subproject - for example, the West Sepik Integrated Development Project which is assisted by an IBRD Loan of US $9.7 million.

Summary

This chapter has explained and described the complexities involved in financing PNG education since the introduction of the NPEP and decentralization. It was noted that despite the greater autonomy of several "wealthier" provinces through internally generated revenue, the bulk of financial control continues to remain with the national government.

An examination of expenditures revealed that during the period in question, the government has continued to increase education's share of available resources, often through external borrowing, so as to provide the finances for new development initiatives. The expenditures show that the government's priority development area clearly is at the primary level, although this is followed closely by secondary and thus would appear to be in contradiction to its stated position with regards non-formal education. Recurrent expenditures also show that personal emoluments are still the single biggest budget item, although this trend is changing through training efforts to increase localization, and thus reduce unit costs.

The chapter clearly reveals that external aid to education has been through the large multilateral lending agencies, and that bilateral assistance to education has been in comparison very small. An examination of costs in each of the major development projects which have been externally assisted reveals that there has been a considerable increase in capital spending for the construction of new institutional facilities, upgrading of facilities, and the supply of equipment and furniture for all levels under the Department's jurisdiction.

In addition, from the information provided on each major project, it is evident that the government has also endeavoured to improve the quality of education at all levels by providing increased training opportunities at both pre-service and inservice levels, specialized fellowships abroad, improved curriculum development and production of student texts and teachers' guides for various subjects, and improved national examinations and analysis of these results.

In administration these development projects and decentralization have resulted in improved consultation between the provinces and the national department. They have resulted in a greater facility and awareness for the need for improved planning at both the national and provincial level and provided the training opportunities to achieve this. Provincial education plans have now been produced, and although much more needs to be done in this area, it has been a significant step forward in the provincial planning process.

This chapter illustrates that educational developments during this period have been considerable and part of a rational planning process by the Department and the government. Each project was designed to fit government priorities at the time. Since most of the educational planning for these projects was done by the national Department of Education, with the cooperation and assistance of the National Planning Office, they were very often opportunistic and timely, and they also permitted a realistic appraisal of government resources available and what external resources would be required for the projects [illegible] proceed.

The next chapter will look at the perceived contributions of these projects, by various knowledgeable educators, to the development of the PNG education system.

Chapter VII

THE CONTRIBUTION OF EXTERNAL AID TO THE PNG EDUCATION SYSTEM

This chapter will analyze the opinions and judgements offered by Department of Education personnel and others who were involved or familiar with the aid process and its contribution to the development of education during the period in question.

As already explained in the 'conceptual framework' (chapter 3) the criteria used for analyzing respondents' perceptions come from Amuzegar (1966:34) and have been slightly modified to suit this study. Since the researcher guaranteed respondents confidentiality in return for their participation, views quoted will remain anonymous.

Clarity and Consistency of Educational Objectives

The importance of this first criterion as a measure of the contribution of external aid cannot be overstated. It is paramount in assessing the judgements of the respondents to determine whether the aid received was consistent with the locally defined educational objectives. Clearly, if the educational objectives of the two parties are not in concert then it is possible that the aid will be wasted, or more seriously, may inhibit rather than promote educational development. It is well known that like any commercial bank, the international lending agencies make explicit the priority areas for which they are willing to provide aid, and that these areas change over a period of time. It was therefore important for respondents to decide whether PNG had to change or compromise its objectives in order to receive assistance. Complementary to this issue, is whether the purposes for which the aid is given were specific and clearly formulated.

In response to questions of this nature, there was consensus from respondents that the purposes for which the aid was requested and received were specific and clearly formulated. Many interviewees suggested that the perusal of any of the major aid-assisted project documents would indicate clear aims, and supporting objectives on how these were to be achieved. It was suggested that this level of consistency between the donors and recipients was because each of the major projects was discussed both formally and informally with the donor during the various stages of project preparation and finally again at negotiations. As further verification, it was pointed out that until the project aims and objectives are articulated and presented in the form of a proposal through the NPEP process, no aid could be approved. But many people felt that it was unfortunate that having achieved this agreement between donor and recipient, all planning then ceased. Further detailed planning was required to operationalize the various components of the projects in readiness for implementation. However, this issue will be taken up further in the next chapter.

With regard to the aspect of whether each major form of aid received was in response to a need which was defined and articulated by local officials, there was general agreement by respondents to the affirmative. However, several Departmental respondents expressed the opinion that since departmental executives are fully informed of what the banks' priority areas of funding are, preparation of a project is too often worked around this knowledge. The result may not always be what is best for PNG. For this reason, they suggest that it is no coincidence that all of PNG major projects just happen to be the same areas of priority funding as the banks (e.g., in the case of the World Bank, capital financing of post-secondary institutions in earlier projects, then changing to primary and secondary qualitative improvements in latter years). One Departmental officer argued that the banks were seen to be doing more than coming to monitor the progress of a project, for on occasion, they went a good deal further than offering advice: "they were not backward in telling you that current policy would need to change if certain goals were to be realized." Another strategically located officer within the Department stated that it seemed to him that the World Bank had assumed the role of the Department's "de facto planning unit" such was their influence in project preparation. He continued

> . . . although their suggestions have been positive, helpful and valuable. . .but their role, its almost like the relationship between the expatriate officer and his associate - how much do you dominate? When are you going to let that person float on his own wings and stand on his own feet ?

It was revealed that in the working up of the Technical Education Project, the consultants working for and on behalf of the ADB became so insistent and insensitive to the needs of the department that the department threatened to cancel the project forthwith. It was serious enough for the ADB to send one of their senior staff from headquarters to settle matters down.

But by far the majority of respondents felt that the banks' input in most projects had been beneficial and supportive. Respondents maintain that many of the unfortunate altercations which have arisen were the result of personality clashes rather than insistence on adhering to bank policy. All agreed that these multilateral agencies have considerable experience in planning educational projects in other developing countries, and through their skilled personnel, have been able to evaluate and advise on proposals put before them. But they suggest, in the final analysis it was PNG which decided what went into projects. This internal decision was made after considerable consultation from within the Department and, where possible, with provincial educational authorities. It was also necessary to consult other internal authorities (i.e., National Planning Office, Budgets Priority Committee) to ensure that it was consistent with national development objectives before proceeding to any of the international lending agencies.[29] As one senior Departmental executive explained

> We were not concerned about World Bank policy, only what we wanted. . . they helped to clarify our thinking. . .if they are not prepared to fund it, and we want it, then we go ahead ourselves using our own funds - thus it does not become part of the aid package.

Yet for all this bravado, many respondents admitted that to expect the banks to give project proposals *carte blanche* approval simply because they were home-grown would be both naive and unrealistic. They concede that the banks have a responsibility to see that projects proposals are viable and contributing to the national plan in order to protect their investment and credibility. Thus most respondents suggested that under the circumstances, recipients of aid have to be willing to "give-and-take" when it comes down to negotiating project funding. In the initial projects, because of a lack of experience, PNG was more than willing to accept bank advice and perhaps in some instances accept what was offered rather than push their own ideas too strongly. A good example of this was in the planning of the ESRDP where the Department had important ideas on strengthening and improving nutrition but were content for the most part to take a back seat in planning and leave it to the ADB consultants. But since then, many respondents feel that departmental staff have become more experienced and more adept in the planning process and now are more insistent on what they believe are the system's needs. They maintain that, in many respects, it has been the Bank which has taught the Department to reject the shopping basket approach in favour of identifying needs and determining priorities. For example, it was as far back as 1970 when the World Bank insisted on a national education plan before discussions could commence on its first education loan, and although political obstacles thwarted this, it nevertheless helped set the Department thinking in the right direction. Also, as recently as 1985, it was again the same bank which wanted to see some reference point as to where the Department was heading before discussions could meaningfully take place on the fourth education loan.

---

[29] in practice, this often involved parallel processing through the NPEP process

Thus as to the question of whether the aid received was consistent with the goals of education as determined by PNG, the answer must be positive in that it was the nation itself that finally decided how change would occur, and what it wanted in its development projects. Although it is true that on occasions trade-offs had to be made, it is also true that they were made by both sides after considerable consultation and negotiation, and so in many respects the oft asked question regarding how much give-and-take there was, really becomes a question of scale and focus.

Facility in the Procedures for Requesting and Receiving Educational Aid

Clearly, if the procedures for requesting and receiving external aid are complex, cumbersome or too lengthy so that the implementation of planned developments by the recipients are impeded or result in time consuming delays, then the utility and effectiveness of the aid process becomes questionable. Respondents agreed that the above criterion was important given the need to have ease of and facility with the drafting of aid proposals in order to have requests approved for external funding.

In the case of PNG, requests for loans/credits for major educational development projects have typically been made to the large international lending agencies like the World Bank and ADB. The reason for this being that such sources have traditionally been used because of the considerable experience and expertise of the staff in developing educational projects in the developing world and because these multi-lateral organizations were able to provide finance in sufficients amounts for these large projects.

Since the major development banks provide on-going loan programmes for many developing countries, there is a process by which the banks analyze each country's development problems and prospects. Firstly, there is a basic economic report on the country's long-term development from a historical perspective. These reports are produced approximately every four years. There is a country economic memorandum, which evaluates current economic developments and policies of the country, and depending on the size of the country and its lending programmes, may be produced annually. In addition there are sector studies done from time to time. These provide a basis for defining sector policies and project priorities. It is on the basis of all this preparatory economic and sector work that the banks are able to prepare a Country Programme Paper in which the nature and scope of the banks' proposed assistance to a country is defined. But this reporting is a continuous on-going process in countries where the bank is regularly involved (e.g., PNG) and has not been considered as a constraint by local educational authorities in the processing of their loans.

In PNG, the relationship between aid and the operation of the NPEP was that the local resource constraint became one for total expenditure, and not just for education as one sector. Thus, it was the national government which decided in what sector it would spend its money (including whatever external aid it had available). Once agreement on the lending programmes had been reached with donors, agreement would then be sought with the bank in about areas in which the money would be spent. So the point to be made is that officially, aid requests do not come from individual line departments, but rather from the government's representative, the Department of Finance and Planning. Yet despite the official channels between the State and banks, there is considerable dialogue which needs to take place between Department of Education officials and the banks with regard to the preparation of a new project and its accompanying request for aid.

Although aid-assisted projects may be different depending on their size, sector or country they all need to pass through various stages prior to approval from whatever bank (or source). Respondents identified these stages as:

1. Identification - Developing countries often have ideas but need assistance in identifying suitable project components to suit their needs. Respondents agree that in

PNG this has often been a troublesome stage. Not always because of a lack of ideas, but sometimes in deciding the best approach for resolving a problem area. For these reasons, it has been necessary to seek assistance from bank education officials, UNESCO and other external consultants. It is also during this stage that informal discussions are held by officials of the country with the banks to ascertain what may be suitable for funding. Alternatively, provisions are often made through a previous loan for studies for identification of the next loan. Either way, education officials in PNG have had to ensure that their proposals were a high priority for development and that the government was willing to support them financially.

2. Preparation - The process of preparing a project for full-scale appraisal is time-consuming and complex because it means examining the technical, managerial, economic and financial dimensions of a proposed project. This stage is the borrower's responsibility and any proposal for assistance must be put in a form which is acceptable to the banks. Obviously the more experience a country may have had in dealing with the banks, the more capable they are in preparing their own proposals. In the case of PNG, for these first two stages, the Department has relied on the assistance of consultants from both the World Bank and UNESCO. Respondents report that the World Bank in particular has been most helpful and sensitive to the country's educational needs. For example it was they who, through the suggestion of task forces, helped to strengthen the national Department's planning capacity. For the preparation of future projects the opinion was expressed by highly placed departmental executives that the Department of Education now has the experience to prepare its own projects and that further reliance on these specialist services is no longer required. Yet several respondents at the operational level of the Department felt this would be a mistake. They maintain that preparation of major educational development projects within the Department, in the past, has essentially rested in the hands of a select few, and that experience in project preparation is not yet

department wide. They suggest the need for continued outside input in this stage of proposal development.

Since these two stages can take up to at least 16 months to complete, respondents were questioned about the length of time involved. All respondents agreed that time was not a concern. They asserted that since these projects were important investments for the future it was vital that sufficient time be spent in their adequate preparation, and the benefits from this would be reaped many times over. There was also the suggestion that this process is beneficial to the department because it helps to focus and often clarify internal directions, allows for detailed planning and often results in valuable input from external sources.

3. Appraisal - This is where a comprehensive and systematic review of all aspects of the proposed project takes place. It is done by bank staff both in the field and back at their headquarters. It involves an examination of all aspects of the proposed project and the prospects for each component to be realized. It determines what features and conditions will be necessary to ensure the project's success. The result is called the Staff Appraisal Report for the project.

4. Negotiations - The negotiations between the government and the banks focus on the contractual terms of the proposed loan agreement. Respondents point out that it is important to have experienced and skillful negotiators as part of the government team, for they often are able to win important concessions at this stage. After negotiations are complete, project documentation is submitted to the executive directors of the bank for board approval. Once approved, the loan/credit is signed and the project can commence.

Since this entire process may take between 2 - 2.5 years (but in some cases a lot less), it is incumbent upon a country to plan and organize carefully so that its requests coincide as much as possible with the bank's fiscal year, in this way action may be speeded up.

In the case of smaller aid requests (i.e., below K250,000), these have in the past, been processed and monitored by the Technical Aid Committee (TAC). However, with the establishment of a single aid management division in 1986 in the Department of Finance and Planning, requests of this nature are now handled through this office. Since these requests are small, they do not become part of the budget process. Typically requests for aid of this nature are to: mount small projects, run specialized training courses or workshops, use volunteer teachers, provide equipment items. These are generally processed without undue delay, usually within 12 months, but understanding that some donor countries have a capacity to react much faster than this. Most donor countries or organizations have their own procedural requirements specifying the types of information that must accompany such requests for assistance. Some of the larger agencies (e.g., UNDP, EEC) even provide a manual to guide an application. The types of information required are no more detailed than what is expected in the documenting of any new project proposal: Aims and objectives; justification of project; work plan; personnel required; detailed costs - local input, external input. Officials familiar with PNG's own NPEP system of having to describe and document new proposals for approval were not surprised to find that no respondent objected to the types or quantity of information requested from from potential donors. The only objections received was with PNG's own internal procedures (having to deal with the sloth-like workings of TAC), in the past, for processing this type of aid. But respondents were optimistic that the new restructures of aid management in Department of Finance and Planning would provide much fewer frustrations. Requests for scholarships and fellowships for training abroad are processed through the Department of Personnel Management (formerly Public Services Commission) and are usually provided under on-going programmes with various donors (Australia, EEC, New Zealand, Canada) whose procedures for requests are standardized and familiar. Respondents report generally no problems with requests for assistance in this area except withe the difficulty both local and overseas officials often have in the identification of suitable institutions abroad to match the exact requirements of the candidate.

Adequacy of Loans and Grants to Meet Local Resource Needs

If the loans or grants provided by external aid agencies are judged insufficient to meet PNG educational development needs then clearly their contribution to the educational system would be in doubt. However, in answer to this question all interviewees (with one exception) responded unequivocally in the affirmative, expressing that without the aid from the banks to those educational projects outlined in the previous chapter, PNG education would not have been able to accomplish what it has today. One aid-Project Manager commented "if anything there is something of an overkill in estimating the anticipated costs and providing for inflation and contingencies."

Yet in spite of this, many respondents remain mindful that the external aid provided to educational projects has come in the form of loans (not grants) and will one day soon have to be repaid with interest. Furthermore, educational loans have provided, on average, only approximately 60% of project costs (approximating to the foreign exchange costs) thus requiring the national government to commit itself to finance the remainder. In addition, since many of these projects have had components of a capital nature, they immediately commit the government to considerable recurrent costs in the future. This situation poses problems for the PNG government, and has been a particular concern for provincial governments. In an effort to reverse this trend, in recent major projects, the Department of Education has been successful in obtaining bank funding for substantial recurrent costs in additional to its development needs. With the Australian budget grant to PNG declining, the greatest potential sources for additional aid to offset this reduction continues to be the World Bank and ADB in preference to commercial borrowing. But for the reasons outlined above, there would appear to be constraints on further absorption of this type of aid in the future.

The operation of the loans provided for educational development projects in PNG are not provided to the government in a lump sum. The loan is disbursed (or drawn down) on a reimbursement principle. Only after documentation (receipts of expenditure, technical drawings and equipment specifications approved, provision of resumes) is forwarded by the borrower and checked at the bank's headquarters are funds, in the percentage agreed to in the loan agreement, reimbursed to the government. Thus the point is that before you can get loan money you have to first spend the government's money. Many respondents complained that practices of late indicate the Government's inability (or unwillingness) to provide these large aid assisted projects with the necessary finance to meet the agreed objectives. They maintain that the PNG Government's scaling down of finance to these projects shows a lack of appreciation of the loan-process on the part of the Department of Finance and Planning because it has resulted in fewer draw-downs on the loans from the banks and has thus reduced government revenue. They also claimed it is slowly eroding the Government's (and Education's) credibility with the banks. On several occasions the Department of Education has had one section of Department of Finance and Planning insisting that the loan be drawn-down faster, whilst another part of that same department refused to provide sufficient money to spend.

All aid-Project Managers within the Department of Education expressed concern that the practice of under-financing yearly appropriations to aid-assisted projects also poses particular problems for the implementing department. For example it has meant that at project completion, since not all of the loan has been drawn-down, the government will request from the banks an extension of the project. The Department of Education then has to hastily decide what mini-components can be used to draw-down the remainder of the loan (this happened in Education I, and could happen in the Technical Project). For the project it has meant productivity has been lost because essential activities are curtailed and project managers have been forced to tailor project scope to the money immediately available. Some respondents maintain that with the operation of the sectorally oriented MTDS and its low preference for education, aid-assisted projects are now being forced to compete with other departmental activities for their funds despite the agreements made with the banks. The danger with this situation is obvious. Unless the Department is willing to curtail its recurrent activities (and this is often difficult), there can be no money available for new development activities, and stagnation results.

On the part of the banks, respondents report their (the banks') willingness to agree to the transfer of funds from one part of a project to cover shortfalls in another part of the same project. This is a reversal of past bank policy and has been particularly helpful to the implementing agency that often needs this flexibility when managing large projects in which unforseen circumstances often occurs. It was probably what prompted one respondent to suggest that there be written into all loan agreements the provision for mid-term reviews, although this suggestion is not particularly creative since the Department has already established an evaluation unit whose purpose is to carry out tasks of this nature. At negotiations it sometimes becomes a battle of wits between sides over the reimbursement percentages in loans. Banks have traditionally favoured financing specialist services, training and civil works[30] but balked at assisting local or recurrent costs. So in this regard, PNG was fortunate in that the World Bank has twice reversed its normal policy by providing assistance for local costs in both the Education II (Community Education Sectoral Programme) and Education III (salaries for local secondary teachers) projects. In addition, in the Technical Project the ADB agreed to finance the salaries of technical overseas staff who are normally funded by the Department as part of its normal operations.

Grants of sufficient size to undertake a major educational development project have not yet been given to education by any bilateral donors, although this is not to down play the grant support for the past several years by New Zealand to assist small non-formal projects under a Non-formal Sectoral Programme. This being about K400,000 annually, it was considered sufficient for its purposes, even though not all of it was expended due mainly to the inability of local proposers to articulate their needs and provide adequate plans. In addition, provinces rarely provided the support and encouragement these small projects needed and the Department's inadequate management of the non-formal sectoral programme only compounded the problem. By 1987, the sectoral programme had been abolished and and along with it went the New Zealand grant aid. Many respondents both from within and outside the Department of Education complained that non-formal education had in the past, and continued to be neglected by the Department and ignored by the Government. They suggested that the imbalance between formal and non-formal would need to be addressed soon by both the government and the Department.

---

[30] by providing 100% reimbursement for these types of components

Flexibility of the Conditions Attached to the Loans

As this study has already explained in previous chapters, PNG aid policies have not attracted bilateral aid to any major development project. Thus the problems generally associated with the conditions of that type of aid (i.e., procurement-tying of goods and services) were not in evidence in multilateral aid provided by the international lending development banks.

Banks have a duty to ensure the finance they provide is spent wisely and not squandered. For this reason, they attach certain conditions as to the use of the loans to protect their investment and, they insist, the investment of the borrower. Yet as most respondents agree, in the event that these conditions are so rigid as to deny the borrower room to operate, then such conditions not only oppose the spirit of the assistance but also necessarily retard implementation. For this reason, flexibility becomes an important criterion to judge whether or not PNG has obtained maximum assistance and benefits from the loans it has received.

In considering conditions to guide the operations of their loans, the banks had to be mindful that in many developing countries in which they operate, there was the possibility that there may not be local control mechanisms in place or, if in place, may be operating with varying degrees of effectiveness. Formulation of their loan conditions thus was to provide for all countries. The key to success, from the banks' point of view, was matching how they would apply their conditions to the local situation of each country.

Initially in the first few education loans to PNG both banks were particularly strict with adhering to the conditions of the loans, particularly the ADB. Respondents report that PNG was made to "toe the line" with regard to the procedures relating to the recruitment of specialist staff, civil works and the procurement of equipment. In the case of recruiting specialist overseas staff for projects there was a requirement that these positions be advertised world-wide to permit all member countries the opportunity to apply. Applications had to be ranked for the positions and sent to the banks for approval prior to engagement. In the case of civil works and equipment procurement the conditions which apply were considerably more complicated. For example, in the case of civil works, architectual drawings and tender documents were forwarded to the banks prior to advertisement. Advertisements were required to go to international competitive bidding (ICB) depending on the size of the package.[31] In some circumstances, prospective bidders were required to pre-qualify for their tenders to be accepted. Special conditions were applied in the awarding of a contract and no contract were awarded until the banks were satisfied that their conditions and procedures had been followed.

There can be no denying that attaching these conditions to a loan has meant considerable extra work for project managers. For example, in earlier projects, loan disbursements had been held up because loan conditions had not been met or documentation accompanying applications for draw-downs had been deemed insufficient by bank staff. Usually this occurred because of PNG's inexperience with bank requirements and procedures rather than any objection to the banks' requirements. However, in the implementation of more recent projects, operational staff of the Department of Education report a definite relaxation on the part of banks with regard to their procedures, particularly the World Bank. Respondents suggested that the reason for this increased flexibility may be two-fold: (i) strict enforcement by the bank slows down implementation and so loan draw-downs are impeded, and (ii) increased confidence in the generally efficient operation of PNG's own control mechanisms. For example, the World Bank is now more willing to approve special preference in tenders for local contractors than previously, and providing specialist staff are acceptable to PNG (no matter where they come from), their recruitment has been approved without question. Also, technical services provided to bank projects by the PNG Department of Works and the PNG Supply and Tenders Board are now more readily acceptable to the banks. This means that technical drawings of design and the whole tendering and awarding of contracts are subjected to a little less scrutiny than before - although one respondent did report that the Supply and Tenders Board damaged its credibility recently with an unacceptable award which will not be honoured by the bank. Also, as previously mentioned, in more recent projects (Education II and III, Technical) both banks have shown a willingness to provide greater flexibility to project management by permitting the transfer of funds from one part of a project to another.

---

[31] as a guideline for either bank, if the package is expected to be in access of approx.US$150,000 for goods, and approx.US$200,000 for civil works.

One well placed respondent involved in Departmental planning pointed to the establishment of an evaluation unit (an idea proposed by the World Bank in the Education II project) in the Department of Education as a good example of increased flexibility. He suggested that this has now become a standard component for subsequent projects and is clear recognition for the need for flexibility in implementation and provides a way for formative evaluation to influence the way in which the project is implemented.

In general most respondents had no strong objections to adhering to the bank loan conditions although some did acknowledge that at times they could be tedious and irksome. Many were of the opinion that PNG, through its good performance in earlier loans, had built up good rapport with both banks and were appreciative of what appeared to be a general relaxation of application of conditions by them. Several interviewees maintained that the banks' conditions were in fact beneficial because they provided the checks and balances that large projects needed to ensure maximum benefits from the loans were obtained. One referred to it as a " second opinion, and a good backup of our own system." But several others saw it differently, one offered

> . . .having to comply with these conditions are constraints. We've already agreed to the other conditions with regard to repayment, the project is now ours. They already know what our own control mechanisms are here, and if they are unsatisfactory or unacceptable then this should have been said during negotiations.

Another respondent, outside of the Government, saw the whole issue as really a question of balance and compromise. It was his view that the banks need to be convinced that their money is being put to good use while recipient countries want to be given the freedom to use this money without interference. This respondent felt that the banks needed to be more willing to assist local contractors than they are

> even though the immediate cost run down may be against it. . .there are long term benefits . ..for it - being here, giving local employment, giving experience so that in the future work will be done better in PNG. It may be necessary to put up with a little delay or inferior quality because of the long term benefits. But the Department and banks don't see this of course, their one and only concern is the project.[32]

---

[32] this in fact has been done; e.g., the Government Printer was awarded the tender to print grade 4 mathematics textbooks. With regard to time and quality their efforts were extremely disappointing and unacceptable to the Department.

Suitability of the Skills and Functions of External Personnel

External aid personnel (usually referred to as *technical assistance* by the World Bank or *consultant services* by the ADB) employed by aid-funded projects have a vital role to play in the implementation of any project. They were teachers (as in the case of the Technical project), curriculum specialists, evaluators, managers, staff development personnel, printers etc. who were assigned to technical colleges and within the Department to teach, organize programmes and act as advisors. Their success in carrying out their roles and functions often determined the fate of a subproject. It was therefore important that respondents were able to offer opinions on their competency and ability to make a positive contribution to the objectives of the project in which they worked.

It should be explained that when the Department of Education began to implement its own projects, in 1981, a conscious decision was made not to create special aid project cells but rather incorporate these new components into existing structures of the Department. Thus a special project unit for all newly recruited project staff was rejected in favour of integrating them into existing divisions of the Department. By doing this it was hoped that project personnel would be better oriented and acquainted with their tasks and that there would be some flow-over learning to national staff. Although integration of this type is one of the most difficult of organizational tasks for new incoming personnel to become accustomed to, respondents report that on the whole the Department has been generally successful in this endeavour.

Respondents agreed that in general these major projects have attracted well qualified and committed staff. In most instances they have shown considerable skill and adaptation in performing their duties and meeting departmental expectations. Respondents report that project staff have been required to meet the objectives of sometimes untidy and ill-defined subprojects whose duty statements, prepared by the Department, were often flimsy and vague. They said that to some extent, this proved a drawback to some of the new staff in that they were expected to finalize detail design of their subprojects without recourse to the originators who may have left the Department. The settling-in process also required them to understand how the Department worked formally and informally and how it related to its provincial counterparts. In addition to achieving the aims of their own subprojects they were often required to identify and train a national associate, and provide advice on a number of issues extraneous to their actual jobs. This resulted in some subprojects being seriously behind schedule. These circumstances sometimes placed an added burden on their patience and professionalism. However, since a number of personnel recruited had previously worked in other developing countries the adjustments for them were not so difficult. Of course, as might be expected, some overseas project personnel measured up better than others but , as respondents pointed out, on the whole, these people have made a valuable contribution to the Department in terms of achievement in each of their subprojects within the time available.

As indicated earlier, recruitment of staff is paramount to the success of projects, aid-assisted or otherwise. If done well and the right people are secured, as the Department's experience to date suggests, there are high pay-offs for the projects, and of course a sheer waste if the wrong people are selected. In the aid-projects since 1980, the Department of Education has made a concerted effort to ensure a high probability that only people who met its needs were selected. This was done by a careful and painstaking process of screening applications and the cross checking of references by the Department to ensure, as much as possible, no unsuitable characteristics were hidden by the usual rather over-generous personnel references. Although this sometimes involved making a K60 international phone call to cross-check on an applicant it was reasoned that this investment was worth it as opposed to wasting K60,000 on a poor selection choice. Several evaluation reports (e.g., Weeks, 1986) indicate that a new approach to the selection of project staff was necessary because in earlier projects (e.g., ESRDP and Education I) insufficient diligence in this area resulted in several bad selections and cost projects dearly in terms of non-achievement of project aims, low morale and resentment among staff.

One of the major problems identified in this area by departmental respondents involved in the process, and previously beyond the control of the Department of Education, was that the actual recruitment process by Government was separate and distinct from departmental selection of applicants. In loan negotiations an agreement is reached on the number and type of technical assistance personnel required to implement the project. But since responsibility for all overseas recruitment for Government service has rested with the Public Services Commission (PSC) and not the Department of Education, this has caused serious problems because the former has been seriously neglectful in creating project positions, advertising vacancies and approving departmental appointments. Aid-Project Managers report that such slackness has resulted in non-availability of staff, loss of interested applicants and projects falling well behind schedule.

The potential dangers with external project staff employed for a limited time, to complete a specific task are great. For example, many respondents reported that it was possible for overseas project staff employed under these conditions to confuse their roles. But even among respondents it was possible to see the difference of opinion which existed over the question of roles for overseas personnel recruited specifically for a project. Most argued that the priorities of the Department must take precedence. One Departmental officer summed up the feeling of most

> If project staff, who have specific expertise in an area, are needed to assist in another area which might affect their job, they should be permitted to do this. The principle in broad terms - they should work within the Department like any other recurrent staff, and be available to do other things as and when required.

But a minority of respondents who were involved in the implementation of projects held the opposite view; that experts were hired to complete a specific task and that their work on this should not be interrupted. Some respondents were able to recall instances where conflicts arose because project staff were offering advice and opinions on matters outside of assigned project work. In some cases this caused resentment among regular departmental staff.

Novelty of Problems Diagnosed and Innovativeness of Solutions

This particular criterion relates to the specialist assistance (often referred to as "experts") provided by external consultants invited by the Department of Education to assist with identifying components suitable for external funding, as well as to provide advice on future directions of the education system in general.[33] Amuzegar (1966:71) suggests this is an excellent criterion for considering the extent to which problem solving has been conducted in an innovative spirit and whether it has provided solutions which have gone "beyond the well known and familiar."

In the context of this study, an example of this type of assistance are members of the World Bank, ADB or UNESCO who constitute the missions who assist PNG in the preparation of projects for external funding, as well as those educational consultants who have been contracted to advise on needs relating to a particular level of the system. Unlike the project personnel discussed in the last section who work on the implementation of projects, these type of consultants are advisory personnel working with executive decision makers who have the opportunity of becoming very influential through the offering of advice, or by making recommendations and proposals which can change policy and thus affect the direction of the educational system as a whole.

There was considerable difference of opinion amongst respondents regarding this form of assistance and its overall contribution. With regard to staff from the World Bank (educationalists, economists, architects etc), respondents rated their advice highly in that they offered a team approach, they had considerable background in PNG (now 15 years), and they were usually well briefed on details of the project under consideration. Because of their wide experience in project work elsewhere in the developing world their main contribution to PNG education may be their creative approach to problem solving and helping the Department define projects and shape its ideas. Respondents argued that because World Bank had the backing and support of a huge organization with well defined processes and considerable research capacity it was able to provide quality advice for its projects in PNG so that all had been properly screened and had clear guidelines for what had to be done. It was suggested that few organizations could match the Bank's impressive array of resources. In praise of the role of the World Bank one respondent was enthused to comment

---

[33] most of the latter studies were funded by the aid-assisted projects

> . . .with the people coming from the World Bank. . . it is the only staff development opportunity that our executives get. They are forced to think critically about policy and what directions they want to go. . .to think through issues. The World Bank does it tactfully and well, and our people gain and grow through participating in this process.

Yet in spite of this praise, as reported elsewhere, some respondents felt that the Department of Education had been far too receptive to World Bank advice and too willing to submit to what ever happened to be Bank policy at that time. One aspiring departmental executive complained

> . . .(World) Bank advice had a negative effect because it assisted in dampening people's creativity. Because of the way these people's expertise is perceived, as if they know most of it, our ideas don't get voiced enough. We need their money and to a large extent we compromise some of our ideas which may be really innovative, but we play it safe and stick with the mainstream because that will get us our money.

In the case of the ADB, it has been PNG's experience that they frequently employ outside consultants (rather than use Bank staff) to assist countries with project preparation. Opinion, on their contributions to education to date, has not been so favourable. For example, in the ESRDP it is reported that, even though the education subproject was an "after-thought" and only played a small part in the whole project, the advice offered in the initial planning of the subproject by the ADB consultants was not of quality and was neglectful of important issues which should have been addressed prior to project commencement. One of these issues, for example was the suggestion by the Department to involve village women (i.e., mothers) in this project. Also, in the mounting of the Technical Education Project, respondents report that the ADB consultants were anything but sympathetic to what the Department was proposing and continued to push for an expanded project. Their remoteness and insensitivity almost resulted in the cancellation of the entire project. On the other hand, Bank staff involved in negotiations and monitoring the project have offered helpful advice and have willing cooperated in matters which required their approval.

As mentioned in an earlier section, UNESCO assistance has been used in the preparation of all World Bank education projects to date. In the initial aid-assisted projects they were more assertive and willing to offer advice and respondents suggested they provided valuable input in the identification of several subprojects. However, as the Department's experience grew UNESCO's role became more of writing up the Department's proposals and offering advice on justification, style and presentation to meet the World Bank's criteria. There exists an opinion within the Department that their assistance may not be necessary for the preparation of future loan requests.

The Department has commissioned many external consultants to advise on the specifics of mounting various subprojects (e.g., McDonald, Dunn, Gould, Spaulding) and consultancy teams to offer recommendations on future directions for various levels of education (e.g., Murray team, and more recently the Bacchus team). Respondents are generally positive in their comments on the substance of these reports. Most felt that PNG's selection of consultants to do these studies resulted in a good combination of skill and experience as well as a good mix of local knowledge and external expertise. Despite this, several respondents, particularly outside of the Department of Education felt that even more use should be made of local academics, suggesting that their use provides more local knowledge and is a lot less costly. When there was criticism of consultancies, it was directed at the Department of Education (rather than at the consultants) for not analyzing these reports more carefully and making better use of their recommendations. But not all respondents were convinced about the usefulness of the consultants who gave advice to the Department, one respondent who had been involved in this process said

> They interview us to see what we are thinking, then they write their report. We don't see too many new ideas. Yet this can sometimes be helpful because we can get positive reinforcement for our ideas from the outside, and this often strengthens and supports our requests for funding.

But another respondent who had been personally involved with consultancies gives another perspective

> external influence is not necessarily negative ...there are obviously things which can be learnt from elsewhere. . . the donor should be able to offer advice to ensure that what the country wants is most likely to be effective. . .so there has to be a balancing between the internal needs and external ideas, this can be troublesome at times.

However, on the specific issue of innovativeness[34] of advice provided by external consultants respondents were also divided. Only a few respondents were prepared to give credit to the external consultants for the innovativeness in the educational projects. It was the ADB consultants in the ESRDP who saw the potential to link health/agriculture/nutrition with the school curriculum in nutritional education. With better planning in the initial stages and more careful management this project had the potential to be replicated in other provinces. It was the World Bank which analyzed more thoroughly (in terms of regional differences, parents willingness to allow, etc.) the position of women in education and called for the expansion of teacher training opportunities for them at Madang in the Education I project. In the Education II project it was the World Bank which originated the idea of a permanent evaluation unit which would provide evaluation to improve the effectiveness of management of project activities. The Department later expanded this role. Also the World Bank in agreeing to finance the Provincial Primary Education Fund of the Education II project was a significant departure from previous Bank policies because as McNamara (1984:10) notes "it had not been their practice to lend money for unspecified projects."

---

[34] used in this context to refer to ideas which have become institutionalized

Appropriateness of Training Assistance Programmes

Each of the major projects (the exception being the Technical Education Project) has made generous provisions for the training of national citizens at all levels and in a variety of fields. This emphasis on the provision of training in the aid-assisted projects is consistent with the Department's image as a leader in localization and staff development. This criterion, therefore, seeks to explore the extent to which external aid to education in the major development projects has been successful in meeting the training needs of the Department and whether the training provided has been of relevance to the changing needs of the education system at large.

All respondents agreed that the aid-assisted projects have provided sufficient training opportunities for Departmental personnel. In the initial project (Education I) the training provided was modest and consisted of a one year conversion course to secondary level for primary teachers at Goroka Teachers' College. In total the project produced 172 teachers qualified to teach junior secondary before its abandonment in 1981. Following this, the World Bank projects began to provide considerably more places for training in a greater variety of areas. The Education II Project for example provided 164 man years of both local and overseas training in the fields of educational administration, teacher education, curriculum development, tests and measurement, evaluation, school libraries, broadcasting, resource centres and printing. The Education III Project concentrated mainly on secondary education and sought to provide pre-service training in subject specialization (300 man years) and local in-service training (136 man years) and graduate studies abroad (8 man years).

Respondents noted that in nearly every case, local officials were responsible for determining the priority areas for which training and fellowships were made available. One departmental executive commented

> if the projects training components have not been successful then we've only got ourselves to blame. . . perhaps we have not been thorough in the selection of suitable officers or types or courses.

All other respondents supported this viewpoint. The money was allocated, and general numbers and areas were agreed as to what type of training was required, but beyond this little else was discussed with the banks. This lack of specificity permitted the Department of Education considerable discretion and flexibility in the types of training programmes it would design locally, and the types and locations it could choose abroad. But one respondent did recall an exception in the preparation of Education III, where considerable debate ensued with the World Bank team over the inservice training for high school teachers. The Bank proposed correspondence-type training and this was opposed by the Department as inappropriate. The Department preferred attendance at classes. A compromise was reached between both parties and the training became part residential and part assignment. On another occasion, during the preparation of the Technical Education Project, the ADB's intent was to include a substantial training component in that project. The Department argued that its training needs were already being met elsewhere[35], and so a compromise was reached between the two by writing into the loan agreement that specified number of technical personnel would continue to be trained abroad each year.

The reason for the banks' permitting this flexibility is clear, in that they recognize that most recipient countries know their own needs, understand their own people and know their own capabilities with respect to training. Respondents advise that the general policy in PNG has been, when all else is equal, to select local training. They maintain that apart from the considerable reduction in costs and the increased numbers local training has permitted, it also had the advantages of providing training in and related to the local context, and it has avoided the cultural and domestic problems usually associated with external studies. Thus it agrees with the literature (McNeil, 1981:96; Hurst, 1983:433) in that the provision of local training has allowed the money to be spent locally and permits an opportunity to develop local institutions by revising current courses, mounting new courses, and employing additional professional staff. But respondents were quick to point out that it was not always possible (nor appropriate) to provide training locally - particularly in the case of post- graduate work or more specialized courses. So, in these instances, institutions abroad are sought. Apart from providing training not available locally, the advantages of overseas courses is that the diploma awarded may be more widely recognized. It is as well an enriching experience in terms of exposure to new situations, different people and cultures. On the other hand, several Departmental respondents knowlegeable in staff development pointed out that PNG has had its share of bad experiences with external training; usually this involved students who had failed to settle in or adapt to their new environment. But unlike many other developing countries, PNG to date has not been troubled by a "brain drain." Papua New Guinean respondents suggest the reasons for this may lie in the strong cultural ties to village communities and also in the prevailing economic situation in that manpower needs for qualified and trained personnel have not yet been reached. Only one expatriate respondent, who had been involved in training citizens, showed dissatisfaction with overseas training process, he commented

---

[35] through Australia's PATCOP programme, and the Colombo Staff College

> . . . overseas training. . .I'm not sure whether these courses and types of training are relevant to our context and the type of job they have to do. These degrees sometimes prove to be dysfunctional -the people "feel"

> qualified and later resent anybody checking on them or advising them.

Respondents suggest that the major constraints to training programmes are local rather than external. They agree that one of the biggest problems continues to be in identification/selection procedures, i.e., making a good match between personnel available and training available. In many instances, associateships or fellowships provided by the aid-assisted projects are delayed, or worse, not taken up because the Department has been unable to nominate a suitable candidate. On occasion when a suitable candidate is selected, the provinces have been unable (or unwilling) to approve the release, usually for a variety of reasons. Another problem respondents advise has been the promotion of associates upon completion of their training, i.e., staff are trained for a specific position yet soon after completion of training are often promoted to a higher position where their training is not used. In addition, teachers particularly, are sought by both public and private sector interests to strengthen their organizations, this loss has proved costly to the Department and is seen as a local-type of "brain drain." One final constraint which all respondents suggested affected local training is the provision of housing for those undertaking training. In PNG civil servants are dependent to a large extent on the government for housing because of difficulties in landownership and costs of construction. Therefore, before departments can promote, transfer or train staff, suitable housing must be guaranteed. There has always been an acute shortage of housing and so this continues to be a limiting factor in staff development and localization. In the Education II project, the construction of twenty two houses was built into the project so as not to impede the recruitment of specialist overseas staff. But at project completion completion, it was understood that these houses would remain the property of the Department. They never did, instead they became part of the government's general housing pool.

Summary

This chapter was concerned with the opinions and judgements of respondents who considered the contribution of external aid to the development of the PNG educational system. Respondents were required to make their judgements as to the effective allocation, processes and uses of external aid in educational development based on selected criteria provided.

The first criterion, *clarity and consistency of educational objectives* , revealed that the aims and objectives for which external aid was allocated had been clearly defined and well articulated. It was suggested the reasons for this consistency of project aims was due to continued dialogue between the two parties concerned. On the question of locally determined needs, there was a division of opinion. Although most respondents saw the bank's input as generally positive and supportive of PNG wishes, some respondents felt that PNG was not being left alone to determine its own educational priorities because of undue influence by the banks. It was instructive to hear that most respondents felt that in the final analysis, the process of aid between the two parties was simply one of "give and take."

Using the second criterion, *facility in the procedures for requesting and receiving aid* , it was discovered that there is a complex procedure by which banks determine their future lending relationship with any country. Although this may be complex it was found that in the case of PNG this involved process was on-going and had not been a constraint to educational requests for aid. It was shown that the first two stages of the project cycle, identification and preparation, were by far the more involved sometimes requiring as much as 18 months. Yet respondents indicated this was not of undue concern and since external aided-projects were usually large, this permitted essential lead time to plan in detail. The NPEP has provided the Department considerable facility with writing project proposals, however, preparing these for aid-funding by the banks is a good deal more complex and the Department may continue to need the assistance of external consultants.

Complaints of the process by respondents was more out of frustration with delays internally than with those of the donors.

The third criterion, *adequacy of loans and grants* , raises the question of whether the loans have met the development needs of education. Respondents report they have, pointing to considerable capital improvement and important qualitative developments made possible through the assistance. In view of the fact that prior loans have been accompanied by local costs and that PNG will be left with considerable recurrent costs at the completion of several major projects, the Department has been less keen on major development activities and has moved more in the direction of negotiating bank funding for substantial recurrent activities. Findings show that of major concern to the implementation of projects has been the failure of the present PNG government to provide sufficient funds of late to achieve all the objectives of the external aid-assisted projects, as per the loan agreement.

A fourth criterion, *flexibility of conditions attached to the loans* , has particular importance to implementation. This study has revealed that the primary source of external aid to education, during the period in question, has come via multilateral agencies and because of this many of the problems usually associated with external aid from bilateral sources were not evident. Several respondents objected to the banks' interference in project implementation in that they require adherence to their procedures and guidelines for the operation of loans. They suggested that since these loans are no longer concessional, PNG should be free to use the finance as determined by local guidelines. But most respondents welcomed the banks' conditions maintaining they were not a constraint to management but essentially a duplication of existing local control mechanisms which had to be followed anyway.

Another criterion, *suitability of skills and functions of external project staff* , looks at the fitness and appropriateness of external staff recruited specifically to assist with implementation of various aspects of the aid-projects. The general assessment was that this category of personnel have made considerable positive impact on the areas in which they were employed. Although it was noted that some staff had difficulties in living up to departmental expectations, this was mainly in earlier projects when departmental selection procedures were not well developed. A dilemma for the Department in this area has been deciding the appropriate role for project personnel employed by aid-projects. The perceptions of respondents reflect the differences with regard to this question: several indicated that their tasks should be restricted to the purpose for which they were employed because of the limited time given them , i.e., work solely related to the project . But the majority held that the priorities of the Department-at-large must take precedence and because this view has prevailed, many project tasks have fallen seriously behind schedule. One of the major constraints identified has been the difficulty with effecting the recruitment process because this function is the responsibility of another government department.

With regard to the criterion relating to the *novelty of problems diagnosed and the innovativeness of solutions* , there was consensus that the World Bank had provided excellent advice with regard to educational problems and solutions. On the other hand the quality of professional assistance from the ADB had been at best patchy, and very much dependent on personalities. The role of UNESCO whose earlier function had been important in helping to identify and clarify thinking, was now considered useful as reinforcement of the Department's position and for preparing aid requests in the special format required by the banks. Only positive comments were received regarding the quality of advice received from external consultancy teams commissioned to undertake various reviews of the system. The general complaint received was that the Department had wasted some of these by not heeding the advice given, or by failing to effect the recommendations offered. On the issue of innovativeness opinions were also divided with some able to provide specific examples of what they considered innovativeness, while others maintained that the advice given and solutions suggested had already been discussed locally. Nearly all respondents agreed there was a need for more use of local consultants.

The last criterion, *appropriateness of training assistance programmes* , provides an indication of the usefulness and relevance of the large training components which so often characterize aid-projects. Nearly all respondents agreed that training programmes having been left to the discretion of the Department, have been allocated to those areas deemed to be a priority. Where possible local training programmes have been preferred. Respondents suggest they have been successful in the training of local officers by improving qualifications and providing better exposure to different work experiences. But they report that a number of problems continues to thwart departmental training programmes: identification of suitable personnel, housing, rapid promotion, and identifying suitable programmes overseas.

Data provided by respondents in this study indicates that external aid provided by multilateral agencies to development projects in education in PNG has made a positive contribution to the overall development of the nation's educational system. It has assisted in providing the necessary resources needed to make planned changes. The changes effected were both qualitative and quantitative in nature. However, this entire study has revealed issues of both a positive and adverse nature which have affected the potential of external aid to education in PNG; while some of these issues will need to be addressed in the future, it will be important that others be continued. Discussion of these issues is the purpose of the following chapter.

Chapter VIII

MAJOR ISSUES EMERGING FROM THE FINDINGS

The findings of this study have been used by the researcher to identify issues which will effect the planning and implementation of future educational development activities in PNG. These issues have been categorized as either positive or negative. The positive issues identified have already demonstrated their worth and importance to the development process in PNG and it is therefore suggested they should be continued. They are:

1. aid supporting PNG's development priorities
2. improved educational planning techniques
3. maintenance of communication with external donors
4. facility with procedures for requesting and receiving external aid

On the other hand, several adverse issues have also emerged from the findings and their deleterious effect on the aid process will need to be addressed in the future. They are:

1. uncertainty of future levels of external aid to education
2. needed improvement in implementation
3. needed improvement in consultation between government departments
4. needed improvement of staff development programmes
5. imbalance between formal and nonformal education provision

Aid Supporting PNG's Development Priorities

Unlike many other developing countries PNG's aid policy channels all external aid through the nation's NPEP/MTDS budget process. It has been seen that the major advantage of doing this is that requests for external aid assistance must first be evaluated in terms of PNG's national development priorities, rather than in terms of the donors' priorities. Unfortunately, too often the latter is what frequently happens to resource starved countries which, in an effort to attract much needed external aid, permit foreign donors to foist upon them projects that have been conceived thousands of miles away with no regard to the needs of the recipient country. At completion, the project usually dies because the recipient government has little enthusiasm or commitment to continue funding it from its own resources. On this topic, Coombs (1985:308) maintains

> All this explains why the landscape of the Third World is littered with the carcasses of pilot projects that have failed to pilot anybody anywhere.

In PNG, this has not been the case because if a project proposal which is submitted to the NPEP/MTDS for approval cannot stand on its own merits and be evaluated against national development objectives and in competition with other project proposals then it is rejected, irrespective of available funding. This is in agreement with Sachs (1971), Goulet (1971) and Miskell (1968), all of who maintain that aid should play a complementary role rather than central role to the local effort.

One additional advantage of channelling aid proposals through the NPEP/MTDS process is that all anticipated aid finance is treated as budget income. Thus all externally-assisted projects become a part of the PNG budget and so their expenditures form part of the national budget expenditures. The merits of this practice are obvious. It permits the national government to carefully monitor public spending. Those governments in the developing world which have opted to exclude externally-assisted projects from their budgets (i.e., who have chosen to treat it as additional income on top of their budget) later realize the folly of this decision when various "unforseen" expenditures begin to lay claim to their scarce budget resources. In such cases, governments are forced to either trim the aid project (or abandon it entirely), or transfer resources to it from some other part of its development budget.

As far as the Department of Education is concerned, another advantage of the practice of passing all aid through the budget is that loan agreements which have been approved then commit the government to a minimal level of development expenditure on education for a considerable time. Education has benefitted in this way because the government's loan agreements must be honoured and these have provided the Department with a guaranteed level of funding and commitment, in a particular area of education, for the next 4 - 5 years. The current situation in PNG is a good example of this at work. For although the government's current espoused economic strategy is to ensure that resources are channelled into productive investment activities (which does include education),,it has also continued to finance, albeit at a reduced level, the major aid-assisted development project for primary, secondary and technical education because of its international agreements with the banks.

Improved Educational Planning Techniques

Although educational planning in PNG only commenced in the mid 1960s its emergence of late as a potentially powerful tool in promoting both development and efficiency for the nation's educational system is hard to deny. The national Department of Education has shown a strong commitment (with able support from the World Bank) to improving its educational planning at all levels, but in particular at the provincial level. The origin of this commitment lies in the belief in a fundamental need for change and efficiency in the system. Thus the capacity to plan and prepare its own development was a major incentive for the Department. In the context of this study, the major incentive was that those plans should reflect the Department's own priorities, rather than someone else's.

A concerted effort at national planning began prior to self-government when the Department of Education began to develop its planning capacity, a process which McNamara (1985:2) describes as "what may be the most influential feature of education developments in the decade." This spawned the production of the Education Plan 1975-80 and its 1978 Mid-Term Review, which Bray (1984:430) claimed "was the most comprehensive yet, and included computer projections based on alternative economic and population growth assumptions." Yet from this time until late 1984[36] no formal national education plan was produced, and many critics claimed these were years of stagnation. But it needs to be remembered that with the advent of the government's NPEP process in 1978 it was required that all departmental planning become integrated into overall national priorities. Thus educational planning by the Department was simply incorporated into successive NPEP's plans approved by the government. Each of the Department's major projects (all of them externally assisted) emanating from the NPEP over the next five years, were considered to be plans which would guide a particular level of education for that period.

Due to the Department's increasing experience with the development of projects, through the years it has been possible to establish a more refined and comprehensive facility with the planning process. For example at the national level, in April 1985, after specialist advice from World Bank personnel, the Department set about a planning exercise which would formulate a comprehensive plan for community school development over the next five years. The model for planning used, involved four task forces each organized to address and report on one of the following issues: curriculum aid learning materials; pre-service and in-service teacher training; enrollment expansion and improved utilization of teachers and school facilities; and planning, management and finance. The plan produced became the basis of the Education IV proposal to the World Bank, and it is envisaged by department officials that this model of planning will be used to develop projects in the future.

At the provincial level, educational planning and management has been the focus of a continuous training exercise to improve capacity in this area. By the end of 1983 every province had produced its own education plan and even though the quality of these plans varied, the exercise proved to be beneficial to the provinces in that it required provincial authorities to think more clearly about where they were heading and what they wanted to achieve. It was a considered a modest start, and one that would require further follow-up and assistance in the immediate future so as not to lose the momentum provided through this project.[37] Several provinces (West Sepik, Enga), with assistance of local consultants, have even prepared educational strategies as part of an overall integrated plan for the province.

---

[36] when the Medium Term Education Development Strategy was produced

Another important aspect of the development of the educational planning process in PNG has been the continued and regular liaison between the national Department of Education and the provincial education offices. Meetings between the two were first arranged in 1979 during the planning of the Education II project when teams from the national Department visited provinces requesting their input in the planning of this project. However, these meetings were more formally organized (a separate meeting for each of the four regions) and held on a regular basis commencing in March 1982. Initially, the purpose of these regional conferences was to advise provinces on the progress of the Education II project and enlist provincial support for its implementation, but after a period of time these conferences were used as a forum to discuss issues and concerns affecting the educational system as a whole. They proved to be of immense value to the planning process and aided the planning of future development projects. Of late, there has been a general recognition that the national Department has worked hard in trying to achieve a more balanced relationship with its provincial partners.

In summary, due to the Department's increasing experience with the development of projects, over the years it has been possible to establish a more refined and comprehensive facility with the planning process. Departmental planning has now reached a stage where it can go beyond articulating its desires and needs, to a point where it can identify and analyze strategy options and develop specific proposals for implementing these strategies. This is what Phillips (1973:59) and Amuzegar (1966:76) claim an organized system for growth requires. The Department's improved planning technique was particularly evident in the preparation of the proposed Education IV Project in 1984/85. In addition, the Department has also shown considerable astuteness in listening to advice from many quarters, and in this respect, it has employed local and external consultants to assist with specific tasks. But always, it has retained the right to make the final choice. The Department's spirit of independence and initiative has impressed and, on occasion, annoyed external agencies. Clearly there is more room for improvement, but the Department's increased facility with planning at the national level has helped it avoid many of the problems associated with conflicting priorities and interest that so often plague other recipients of external aid.

---

[37] provision to continue this kind of assistance to provinces in the future has been included in the proposed Education IV project. Although this project has already been appraised by the World Bank, it has yet to be approved by the PNG government.

Maintenance of Communication with External Donors

PNG has benefitted from its rather late development by learning from the experiences of other nations with respect to external aid. Many of the developing countries which emerged independent in the late 1950s and 1960s had to face external lending agencies which were more rigid and hard nosed in their lending policies and the evaluation of proposals put before them. During the 1970s, however, it became generally accepted throughout the world educational community that many conventional arrangements and practices were obsolete and inefficient and required substantial change. Also at this time, there was also a growing dissatisfaction among developing countries with external aid per se and through their increased sense of independence and self-reliance, they were determined to make their own development decisions and plans and reduce where possible their reliance on foreign experts. In this climate, the World Bank produced their 1980 Sector Policy Paper, which revealed major shifts of emphasis in the

Bank's attitude towards educational development in developing countries. Many of these major shifts have helped to influence the shape of PNG's major development projects (i.e., need for qualitative improvements, emphasis on primary education, commitment to improved planning and efficiency). The important point being made is that, leading up to 1980s and beyond, there was an altered climate of external cooperation - particularly on the part of multilateral agencies - and PNG has been astute enough to recognize this and use it to its advantage.

PNG educational officials have always placed importance on the need for open communication between themselves and the educational representatives of the banks. Their motives for insisting on this stems from the belief that regular and genuine exchange of information between themselves and the banks would create a climate of mutual trust and understanding and thereby facilitate the passage of funding proposals. Clearly if the banks were familiar with the goals of educational development in PNG, and if PNG was cognizant of what the banks' funding priorities were then there was less likely to be conflicts of priorities and interests between the two. In PNG, this appears to have been the case with the World Bank and to a lesser degree with the ADB. This is not to suggest that in the preparation of projects there has been no disagreement. Departmental officials have always shown a keenness and shrewdness to attempt to have all of their proposed activities funded (in spite of bank policies) and the negotiations which ensued became a battle of wits with each side knowing what was non-negotiable and how far they were prepared to go without seriously compromising their principles and policies. The Department, in most cases, has appreciated the advice of the banks and has recognized that they have considerable experience in educational development. On the other hand, the banks generally accept the principle that countries must be left to determine their own educational priorities. Thus the power relationship between donor and recipient (Krassowski, 1968:18) and the need to exercise leverage (McNeil, 19881:10) so often referred to in the literature (i.e., the vulnerable position of developing countries seeking aid) is not seen as an issue in PNG because the government's stated position has always been that if it cannot get the project it wants then the aid would be refused. An example of this was in the planning of the Education II project, when the World Bank wished to include a substantial non-formal component. For a number of reasons this component was not supported by the Department and so was dropped from further discussions. When critics point to undue bank influence in PNG educational planning, the Department counters that if there has been bank influence, then it has been generally positive and it has been accepted because it is what the Department believes is in the best interest of the nation. This qualified acceptance of bank assistance by PNG is in direct contrast to the views espoused by Hayter (1971), Williams (1976) and Jose (1982).

Much of the good relationship the Department says it enjoys with the banks can be attributed to the openness and good communications it has nurtured over the years. It will be vitally important for future PNG education executives to continue to build upon these mutual cooperative relationships so that both parties continue to work as equal partners on a collaborative basis. To achieve this, there will be a need to continue to exchange information with the banks, keep abreast of bank policies and develop a knowledge and understanding of the external aid process.

Facility with Procedures for Requesting and Receiving External Aid

Over the past decade, through its continued interaction and dialogue with the development banks, the Department has been able to build considerable knowledge and expertise in requesting and receiving external assistance for education. The Department has now recognized the importance and need to have well developed proposals which not only support an overall educational plan but which can also be related to the nation's development priorities.

These proposals need to describe aims, objectives and analyze existing policies, costs of each component broken down into local/foreign, and contain a work plan on how implementation will be managed. Since each project component has to be justified and later defended at appraisal it has been necessary to seek external assistance with preparation so that the proposal is in the format required by the donor. Also, since these projects require considerable investment of resources and their effects are often far reaching, it has been necessary to seek advice from external consultants on the ideas of the Department under consideration. Respondents have acknowledged that very often this process is time consuming but, they insist, necessarily so and, as many suggested, important to the success of the investment. Their advice is that these requirements are not unreasonable or onerous, and for the future success of the project, efforts should not be made to circumvent this process. Generally among respondents, there exists the belief that the Department has developed considerable facility over the years with the procedures for requesting and receiving assistance from multilateral agencies, and that provided this knowledge and skill is shared between appropriate officers the Department will continue to attract external aid funds in the future.

The issues which follow were identified as significant in that they have the potential to create problems relating to the planning and the implementation of future educational development activities in PNG.

Uncertainty of Future Levels of External Aid to Education

The last Wingti Government in PNG, but particularly the one recently returned to power in the June 1987 elections, has had the task of reviving economic growth. As discussed in an earlier chapter, the government's main development objectives was to re-direct spending to major growth sectors which includes agriculture, minerals and energy, trade and industry and forests. Education, placed in the social services sector, has had a reduced government priority and that has translated into considerable budget cuts.

The implications for the whole education system have been made clear. With reduced government support, all development activities of the Department will have been curtailed. Thus while the Department has had relatively high recurrent expenditures maintaining the *status quo*, its development expenditures, which are used to finance more innovative-type improvements, shows under-investment, with little or no prospect for change in the future. For example, the Education IV project which has been prepared by the Department and appraised by the World Bank is still on hold, and given present government thinking, is unlikely to be approved in the short term.

To offset this situation the Department will need to look for alternative areas for funding. One possibility is preparing a number of smaller development projects (as opposed to the larger ones of the past) which may be more attractive to bilateral donors. Since major expenditures in many of the previous projects has been in the area of technical assistance and training these could be offered to prospective donors for funding thus reducing costs. Another possibility could be co-financing, whereby the banks provide finance for off-shore costs and a bilateral donor finances on-shore costs. Obviously, the best scenario for PNG would be for PNG to find more bilateral donors willing to provide unconditional support to the budget or at least, provide project-aid. The intention of the PNG government to start an Aid Group in 1988 may help with attracting more aid.[38] But another object would be to get the multilateral banks to either increase their concessional loans or reduce their lending rates to developing countries. The hope of getting either of these two arrangements from the banks would appear remote, and so inadequate funding to PNG education may continue, resulting in stagnation and reversing the achievements which started a decade ago.

---

[38] an Aid Group is where a group of donors to a recipient country meet (often hosted by the World Bank) to discuss the development needs of that country and commit themselves to a certain level of aid for the future.

Improvement in Implementation

Although this study has already acknowledged the Department's capacity to plan its own development projects, this judgement needs some qualification. Any planning process involves a number of interrelated steps and, in the management of several of the major education projects in PNG, effective implementation has been lacking.

Since most of these projects have been very large and complex in their aims and structures (e.g., the Education II Project has over a dozen subprojects mostly attached to the national Department, but designed to strengthen educational support services in the provinces) they were in need of more detailed planning at their subproject levels. But neither the brief statement of aims in the appraisal reports, nor the general duty statements for each new project position provided the framework which was necessary for successful implementation. Added to this, new project personnel recruited to implement the various sub-projects were integrated into the existing Departmental structure with little orientation. Working through normal departmental channels and with no priority, they were expected to complete their assignments in unrealistic times (e.g., it was envisaged that each textbook writer would write, trial, in-service teachers in the use of, and train a local counterpart all within two years). Difficulty has also been experienced with respect to the professional coordination of activities which cut across departmental divisions or sections. While the project manager's role has been reduced to no more than a "super-clerk", responsible for little more than the project's financial budgeting and accounting, advice and authority for professional matters has not always been forthcoming from section supervisors responsible for the operation and integration of the various sub-projects. When it has, because of their inexperience and inappropriate skills, this has sometimes led to confusion and delays, with conflicts and frustration for project staff.

Thus the absence of an adequate project implementation plan or the underestimation of its complexity has been one of the major causes for projects falling behind schedule in PNG. World Bank research (Romain, 1985: iii) indicates a similar problem with other projects in many other parts of the world. The Department, in its planning of the Education IV project, made a concerted effort to correct this deficiency by producing implementation strategies for each of the subprojects. This involved consideration and detailing of various inputs and their timing, arrangements for decision-making and the coordination of activities within and among subprojects, delivery mechanisms, criteria and arrangements for monitoring subprojects, and procedures for adapting subproject strategies to changing circumstances. It is essential, therefore, for successful implementation that complete and detailed planning of this nature be continued for other externally-aided projects which may be prepared in the future.

Improvement in Coordination Between Government Departments

To implement its development projects the Department has needed the full cooperation of several other government departments. Due to a number of reasons it hasn't always received the support or consideration it needed from these departments. Thus building a more effective inter-departmental relationship for the successful management of its aid projects should become a prime concern for the Department in the future.

Prior to 1985 the Department of Public Services Commission (PSC) has had responsibility for most aspects of recruitment ; creating new positions, advertising vacancies and issuing contracts[39]. Despite every effort by the Department to consult and advise the PSC of its requirements with regard to staffing of educational aid projects, extended delays in the recruitment of specialist overseas staff has caused slippage in the scheduling of many subprojects and has affected implementation. Realizing the inadequacies and limitations of the previous system, the government in 1986, introduced new legislation, the Public Service Management Act, giving departmental heads specific powers with regard to personnel matters. The new General Orders of the Act spells out procedures and criteria on how the Act will be implemented. Although the creation of positions still remains with Department of Personnel Management (ex-PSC), recruitment of staff is now shared with line departments. Specifically with regard to the recruitment of overseas staff, approval has been given to individual departments to proceed with their own recruitment provided a position is vacant and that the department is within overseas manpower ceilings as set by the budget. These important changes to the recruitment process have been designed to cut red tape and give line departments the flexibility they need. How significant the changes are only time will tell. But clearly with considerable authority for recruitment now devolved to line departments, it will be up to the Department of Education to use these powers efficiently and effectively to make the system work. However, to have any chance of success both Education and Personnel Management will have to make an effort to promote dialogue so as to have a clear understanding of each others' requirements.

---

[39] selection of applicants is done by the Department of Education

Finance is another area in which there has been a serious lack of coordination between departments. From the Department of Education's position, it has appeared that one branch of the Department of Finance (e.g., loans) is unaware of what is happening in another branch (e.g., budgets) of its own department. Even after the National Executive Council (NEC) had given approval to commence the externally-aided educational projects and entered into agreements with international agencies to jointly finance them, the executing agency (the Department of Education) has been thwarted by the Department of Finance in its efforts to obtain adequate funding for the projects' activities. Although one reason for this may stem from the fact that harsh economic periods have forced a reduction of all government activities, it may also point to a lack of appreciation and sensitivity by the Department of Finance (and by implication, the national government) as to the importance of externally aided projects. To show disregard for aid-assisted projects in this manner points to poor aid-management by the government and, should this be permitted to continue, would eventually erode PNG's credibility with other potential external donors.

Fortunately, it would appear that this weakness in the system has been realized, for the PNG government has since rationalized the activities of the former Department of Finance and the former National Planning Office and, through restructuring, has established a single Department of Finance and Planning. As explained previously, within this new department a Foreign Aid Management division has been created, and charged with the responsibility of handling all matters pertaining to external aid. It is the hope of all concerned that this will, in the future, provide an accessible channel to the NEC so that matters of constraint to the operation of all externally-aided projects can be rectified before too much damage is done to the aid-assisted projects concerned.

For its part, the importance of all this for the Department of Education should be to actively seek to improve the communication channels between itself and other line departments involved in the implementation of its projects. In the past, this has not been pursued with any vigour. The preferred method has been to rely on written communication between departments to resolve differences, and this has had mixed success. It may now be an opportune time to develop personal contacts and open channels for dialogue through the new Foreign Aid Management Division of the Department of Finance and Planning. Since this Division is now the principal arm of the government advising the NEC on aid policy and controlling all aid administration it is important that the Department of Education develops an effective relationship with this bureau in particular, as well as the department as a whole, so that financial constraints to implementation are known and consequences are understood at the highest levels of government. A good beginning might be to solicit a high-level representation from this Division to be members of each Project Management Committee for each project. It may also prove to be an effective channel of securing general advice from the National Planning Committee on the possibility of ceilings for future educational loans, or identifying potential bilateral donors interested in assisting educational projects. With respect to the latter, clearly it would be advantageous for Education to keep close contacts with this office so that they are aware of the number of project proposals awaiting external support.

Improvement of Staff Development

Although there can be no doubt that the Department of Education has been the front-runner of the civil service with regards to localization and staff development, it is also true that this area of operations continues to be constrained by many factors: One of the most important of these is the staffing of the Staff Development Unit (SDU). The personnel of this unit are former teachers who, despite their keenness and enthusiasm for their job, lack experience and have no formal training in staff development. The Department needs to have more qualified personnel in the area of staff development to assist and strengthen the operations of the unit and to train local staff in staff development work. Both of these aspects could be accomplished, at minimal cost to PNG, by arranging the secondment of qualified staff through the project-aid programme with Australia. Complementary to this, it seems that for years the SDU has struggled dutifully to implement a program of localization which was devised in the early 1970s prior to self government. Clearly, the Department needs to review its policy on localization and staff development. SDU should then be provided with clear guidelines on how this new policy should be implemented.

For years, a common complaint has been that the Department has been unable to identify national teachers or administrators, in sufficient numbers, able to undertake the associateships or scholarships available. With a workforce of 11,000 community school teachers and 1,500 secondary teachers, all of them citizens, it is difficult to see why this situation should exist. So despite the recommendations of a 1985 UNESCO consultancy (Yeoman, 1986:32) which recommended reduced funding for executive assessment workshops[40] , the views of respondents of this study suggest there is a need to improve methods of selection and intensify efforts to provide adequate numbers to undertake further training and eventually localize fully both the teaching force and administrative personnel of the Department. This would help to substantially reduce educational costs.

Another constraint to training programmes has been the difficulty in getting teaching staff released from their provinces so as to take up training offers. This problem is seen to arise because the provinces who employ the teachers, were not always informed in advance of staff development plans designed in the national Department and, therefore, had difficulty finding replacement staff during the training period. Efforts to permit broader representation in the development of staff-development policy (i.e., provinces, PNG Teachers' Association) must be sought to improve cooperation and efficiency of operations.

The operation of the localization process has also been hampered by the lack of available housing to accommodate associates during and after their training programmes. Unless housing is available, transfers cannot be effected to undertake associateship training. But this problem is not only confined to the Department, for it is known to have effected the universities and other government departments. Its solution, therefore, rests not with the Department but on the political will of the PNG government to stop paying lip service to the localization cause and to positively attack the housing problem. The Department, for its part, needs to continue to press in its development projects for additional housing for staff development.

One final constraint identified by the study was that of teacher wastage. Trained teachers continue to leave the profession in large numbers because of a variety of complaints about the system: insufficient pay, poor housing, poor prospects for further training, lack of teaching aids, lack of school facilities, isolation etc. - they generally have no difficulty in finding alternative employment, usually with improved conditions and better salaries. Through its development projects one of the aims of the Department has been to attempt to improve the school environment for teachers and students. Also, these projects have been able to provide significant amounts of additional training (both pre- and in-service) for teachers and, for the more able, further opportunities for promotion. It is important that these fellowships be more ably planned and organized with the SDU exercising more control, particularly over course options taken by trainees in the B.Ed (Inservice) degree and by providing fellowship holders with a clear and realistic career-path guide prior to the completion of programmes.

---

[40] whose aim is to identify national teachers with the potential to undertake further training and promotion

Imbalance between Formal and Non-Formal Education Provision

Any adequate assessment of PNG's educational supply provisions requires a discussion of not only its formal education system, but also its non-formal and informal learning provisions and resources. In PNG with 80% of the population living as subsistence farmers in a rural setting, and with 63% of grade 6 children unable to continue their formal education, there can be little doubt about the need for non-formal education to both adults and out-of-school youth as pointed out by Seers (1969), Freire (1973) and Zachariah (1985).

The Department of Education's 1983 total expenditure on all non-formal activities was K490,000 or 0.4% of total educational expenditures (Papua New Guinea, 1984:120). In 1984, with considerable grant aid support from the New Zealand government, the national Department of Education took responsibility for the management and coordination of a Non-Formal Sectoral Programme. Essentially this programme was to provide assistance for selected rural-based non-formal programmes. By 1987, this sectoral programme was gone, and the Department's non-formal division had been abolished in restructuring. Yet while this was happening, both the Department and the Government (through the MTDS) had nominated non-formal education as its second highest priority for further development. The blame for this must be shared between the new Wingti government and the Department of Education. The former because, despite its lip service on the need for continued rural development, had failed to provide adequate resources for non-formal education; and the latter, because of its inertia and its failure to supply the necessary experienced personnel to adequately support non-formal education per se or to administer efficiently the non-formal sectoral programme.

Yet despite opinion to the contrary (Papua New Guinea, 1984:141), non-formal education programmes do not have to involve huge sums of money - in fact, many would agree that in PNG, this may have been a limiting factor in that many small projects start with enthusiasm, run for awhile and then die because of lack of moral support or know-how. But in many cases the prime ingredients needed were self-help, commitment and encouragement and support. The major expense item for projects is salaries for personnel responsible for assisting with the organizing and conducting the projects. In this regard the resources of volunteer agencies such CUSO, VSO, USAID or AVA could be tapped to provide personnel experienced and trained in non-formal techniques. In addition, personnel such as these could give citizens training and run workshops in areas such as cooperative leadership and community development leadership as they do in non-formal programmes in India, Sri Lanka and Thailand. Also, as Ahmed (1983:41) points out the key to efficient use of educational resources lies in pedagogical approaches that move away from the reliance on full time professional teachers in a classroom. In the interest of maximizing the pay-off from the education budget he suggests the need to widen the use of other approaches such as distance teaching, self-study, and supervised work experience. It is clear that the structural flexibility of non-formal education is more amenable to these approaches and more cost effective. New Zealand in the past, has already shown a willingness to support small-scale non-formal projects in PNG and, providing project proposals are well planned, carefully monitored and evaluated, it is likely that other bilateral donors would be interested.

Clearly, there is a tremendous need for balance in education in PNG. Several respondents expressed concern for the lack of attention in this area. They recognized that the national Department of Education needed to exercise leadership (particularly with regards to a national literacy programme), and provide training for non-formal educators in support of the provinces. However in view of past failures of the multitude of agencies in this area and their compulsion to be self contained and work independently of each other, it is now incumbent upon the Government to consider more seriously the proposal by representatives of these many agencies who wish to see an independent authority set up (Basic Education Services Incorporated) to administer and control *basic education*[41]. Experiences in other countries suggest that an overall supportive political environment is much more critical for the success of the complex task of non-formal education. Thus for the Government not to be concerned about the lack of progress in this area in the past, or not to provide the resources necessary for non-formal education in the future, which could provide individual improvement for the bulk of the population, would be a retrograde step on the road to development.

Summary

By way of conclusion, it is suggested that the positive issues identified in this study be continued and, where appropriate, be strengthened if external aid is to continue to play an important role in PNG's future educational development. With regard to the adverse issues, it is acknowledged that the Department has been aware of some of these and in some instances, corrective measures have been taken. Nevertheless, it would be advisable for the Department to: strive for better implementation planning of its projects, continue to improve consultations with other government departments, and improve the efficiency of its staff development programmes. In consultation with the government, the Department needs to explore alternative areas of external aid (i.e., bilateral) for funding future educational projects/programmes. Both the national government and the Department need to show a stronger commitment to supporting non-formal education in the future so as not to deprive a large proportion of the population an opportunity to participate in development of their country.

---

[41] a term defined to include structured and spontaneous learning processes and experiences outside the formal education system which will build knowledge skills and information necessary for people to participate in their society and improve their ability to upgrade their own living standards (Papua New Guinea, 1986:31)

Chapter IX

CONCLUSIONS AND IMPLICATIONS

The central concern of this study was to examine the educational developments which had taken place in Papua New Guinea during its post-independence decade, 1975 - 1985, and determine to what extent external aid had contributed to the planning, implementation, and financing of these educational activities. To do this, developments in the Papua New Guinean education system were described and analayzed, as were the changes and reforms provided by the major development projects funded in part by multilateral external aid.

The study was not designed to empirically test hypotheses, but rather using a qualitative-interpretive approach, research questions were designed to discover the nature of the educational developments which occurred in the country, as well as the changes in educational philosophy which took place. This entailed the examination of policies and priorities for educational development and the projects which were planned to achieve its development objectives. The systems approach was chosen as the analytic framework for the purpose of viewing the educational process as a whole and seeing what elements related to educational change as a process. External aid was seen as a resource input into the total educational system and was highlighted in terms of the sources, the forms in which it was requested and received, the educational levels and areas to which it was allocated, and through the various projects, the objectives it was designed to achieve. In addition, the administrative procedures and the process for requesting, receiving and implementing external aid to education were investigated to see how such procedures and administrative arrangements affected the implementation of the aid projects. Of major importance to the study was the adoption of a number of explicit criteria from previous research, for the purposes of analyzing the perceptions of key respondents on the overall contribution of external aid to the development of the PNG educational system.

The following represents the major findings of the study together with conclusions and their implications for the future:

Summary of the Major Findings

Question 1

What were the major educational developments in Papua New Guinea during the period 1975 - 1985, particularly those concerning educational policies, programmes, administration and finance ?

The four most dominant features which best characterize the direction of development, between 1975 and 1985, in the PNG educational system were:

1. Quantitative expansion and improvement of educational services and facilities at all levels, but more specifically, at the primary level of the system in order to provide better access and achieve equality of opportunity.

2. Qualitative reforms in search of relevance of what is taught and learned, as well as some reorganization of the educational structure.

3. The quest for internal efficiency through improved planning and management at both the national and provincial levels.

4. The pursuit of increased localization through the provision of increased training opportunities for national staff.

These policy decisions were taken to ensure that the system of education was responding to changing political, economic and social conditions of the period. They also reflected a change in educational philosophy from one which had been essentially elitist in mid-1960s to one which later emphasized egalitarianism.

Question 2

What were the local resources constraints in the implementation of the planned educational developments during this period ?

In seeking to develop a modern and equitable education system, Papua New Guinea required additional capital for investment. Although the government appropriated a large proportion of the nation's budget to education this was, in the main, expended on recurrent activities. However, additional resources were needed for the implementation of its development plans for education. The resources required took two forms: *capital assistance*, to supply the "physical" infrastructure needed (buildings, equipment, textbook production etc.); and *technical assistance*, to supply the know-how in the form of skilled expatriate professionals, and the provision of training opportunities for citizens. These resources were supplied by multilateral agencies in the form of aid (credits or loans) which was then used by Papua New Guinea to purchase their requirements.

Question 3

What were the major forms of external aid that Papua New Guinea successfully negotiated and received during the period 1975 - 1985 ?

Capital Assistance

External aid has been instrumental in assisting to build many new educational facilities (e.g., high schools, libraries, laboratories and workshops, dormitories, staff houses), as well as expand and upgrade existing facilities. The most notable achievements with regard to capital works have been the construction of the Department's Curriculum Development Centre, and the establishment of a Technical Teacher Training Centre at Goroka. In addition to capital works, aid has also assisted in the provision of various equipment for all high schools as well as post secondary institutions (the Inservice College, Madang and Goroka teachers' colleges). In this regard, it is worth singling out the provision of equipment to upgrade all technical colleges as being most significant. Other areas to have received capital aid were the Department's printshop, libraries, and measurement services.

Technical Assistance

In terms of technical assistance, the Department used external aid to recruit skilled expatriate services in the following areas: curriculum development, production of textbooks, introduction of resource centres, measurement services (examinations), improved planning and management, project management, project evaluation, school libraries, trade instructors for technical colleges. In addition, external aid has been used to fund external consultants to undertake specific research of importance to the Department. Finally, significant amounts of external aid have been used to provide training opportunities for citizens both locally and abroad.

Question 4

When and for what purpose was the aid requested ?

External aid from the multilateral agencies assisting the Department of Education in PNG, has always been tied to a specific purpose and a specific form, although experience shows that the agencies do vary in the levels of specificity that they attach to their aid. Moreover, it has been the PNG experience that individual agencies have shown a tendency to be more accommodating in their practices and procedures over time. The following summarizes educational aid received from multilateral sources during the period in question:

Education I Project (1976 - 1981)

The two main aims of this project were: (a) to help meet manpower needs in agriculture and health extension, the teaching service and industry, and (b) to support planning and studies essential to the long range development of education and training in PNG.

East Sepik Rural Development Project (1977 - 1983)

This was an integrated rural development project. Its educational aims were: (a) to develop an integrated curriculum which led towards improved self sufficiency in agriculture, better utilization of land and better nutrition and health, and (b) develop practical working skills and experience to promote the concept of self-help.

Southern Highlands Rural Development Project (1978 - 1983)

This also was an integrated rural development project. Its educational objectives were: (a) to expand secondary enrollments, and (b) to develop adult, community-based educational programmes for the province.

Education II Project (1981 - 1988)

This project aims were to (a) promote greater access to primary education by assistance to the provinces to expand existing schools and establish new schools and to reduce pupil shortage; (b) raise the quality of primary education through the production of improved textbooks, materials and teacher training; and (c) enhance the capabilities for effective management of education particularly at provincial planning level.

Technical Education Project (1982 - 1987)

The aims of this project were (a) the upgrading and expansion of equipment and facilities within the existing technical and secretarial colleges in the country; (b) the establishment of a permanent technical teacher training centre; and(c) the improvement of apprenticeship conditions and training provided by Department of Works and Supply.

Education III Project (1984 - 1988)

This project had as its objectives (a) expansion of lower and upper secondary school places and upgrading of school facilities, (b) provision of appropriate teaching materials and upgrading of the secondary teaching force, and (c) implementation of strengthened policies and evaluation practices.

Question 5

What factors constrained either the negotiation or implementation processes ?

Related to the external aid process, a number of issues - some advantageous and beneficial, and the remainder adverse and posing problems - were perceived to have an effect upon future effective planning and implementation of development projects.

A. Advantageous Issues

1. Insistence by the national government that all external aid support the nation's development priorities has provided the necessary local input to ensure local needs are met.

2. The development of improved planning techniques by the national Department of Education so that it can now identify its own needs, analyze strategy options, and develop comprehensive project proposals as solutions.

3. Maintainance of effective communication channels with external aid donors thus promoting better understanding between the two and reducing the likelihood of conflict of priorities and interest.

4. Through the Department's continued interaction and dialogue with the multilateral aid agencies it has been able to build considerable knowledge of the project cycle and expertise in the procedures for requesting and receiving external aid.

B. Adverse Issues

1. Reduced government financial support for educational development activities has slowed down implementation of aid-assisted projects and if continued may result in stagnation, thus reversing the positive achievements made to date. Alternative sources of funding need to be identified.

2. In the absence of provincial commitment to improved educational planning and management future educational change will be minimal and efficiency will remain low.

3. The failure to achieve intra-departmental cooperation and coordination has hampered the effective implementation of aid-assisted projects.

4. The failure to provide detailed plans for the implementation of aid-projects has resulted in poor coordination of effort, role confusion, increased costs, scheduling slippage.

5. Implementation of fellowships and associateship training in aid-projects has been hampered by a vague, outdated staff development process and unqualified and inexperienced staff officers operating it. In addition, constraints such as securing releases for trainees and housing continue to retard the process.

Question 6

What has been the nature of the contributions of external aid - as perceived by those interviewed - to the overall development effort ?

External aid to educational development in PNG has been timely in that it came during the first post-independence decade. This was a time when critical re-thinking of the existing system was taking place and the effects of decentralization were being felt. It was also a time of limited financial resources and there was a shortage of trained and experienced manpower to assist the change movement. It was the almost unanimous opinion of respondents, that external aid has been beneficial in that it provided the finance for the Department to tackle the aforementioned obstacles and enabled the country to progress with its educational development activities (i.e., project aid). In addition, some mention should be made of the World Bank's willingness to depart from normal policy and provide aid to be used to support and consolidate important on-going departmental activities (a type of programme-aid), which had commenced earlier without assistance. But, perhaps, as several respondents have suggested, arguably external aid's most important contribution may have been that it helped to provide advice, stimulus and confirmation for the ideas and proposals of Departmental decision-makers.

Question 7

What salient issues emerged from the findings, and what are the decision-making implications (either negative or positive) for the recipient, in the use of external aid as an instrument of educational development ?

This question is answered by the discussion which follows.

Conclusions and Implications

Based on the findings of this study, several conclusions and their implications for future Departmental decision-makers at both the national and provincial levels, may now be stated.

Educational Development Priorities

In terms of decisions regarding further educational development, there is a need to attempt to resolve the national/provincial conflict over educational goals. The national education authorities have for years pursued the goal of universal primary education and development expenditures are indicative of its top priority. Most provincial education authorities, however, have shown a tendency to give priority to the expansion of high school places and more qualitative improvements in preference to primary expansion. In addition, since advantaged provinces were able to use their unconditional grants to build additional high school places, much of this expansion contradicted the national priority to disadvantaged provinces. In defence of the provincial education authorities, it must be understood that they were reacting to the demands of their provincial politicians and vocal parents who saw secondary education as providing a career advantage for their children.

Although there has been considerable improvement in relations between national/provincial educational authorities greater consideration must be given to provincial views in the future planning of development projects. As Bray (1984:142-143) notes, despite the 1983 Education Act which gave considerable more powers to local authorities, centralist views continue to dominate the provincial scene. Yet as

MacNamara (1985:11) suggests, that given the wide diversity of provinces - particularly in terms of skilled and experienced administrators - "there seems a clear need for national initiatives and leadership in helping provinces to define problems and develop the necessary training programs." But in an effort to ensure that maximum benefits are obtained from developmemt projects - and thus from external aid given - it is paramount that agreement be reached on what education's development priorities are so that full cooperation and support from all involved be given to the implementation of the projects. Clearly with the devolution of substantial educational responsibility to the provinces, centralist views alone should no longer dominate educational direction.

The need for greater collaboration between national and provincial education authorities will be required even more so should the recommendations of the Matane Report (1986) be approved by the national government. This report lists 23 recommendations which would introduce radical changes (many for the better) to the current education system. For the Department, the most far reaching effects would be felt in the area of curriculum development: vernacular languages as the medium of instruction in early years of primary; less subjects taught at primary ("aim for less and do it better"; three new subjects introduced: resource development, social development, spiritual development; and the philosophy behind educational planning needs to be changed to human development of all persons instead of manpower needs for economic development. If such radical changes are approved, it will require considerable skill in planning and management by administrators to implement these changes. Cooperation and communication between the two levels of administrators will become much more crucial.

Non-Formal Education

With little improvement in the decade in access to a secondary or tertiary education, the evidence presented in this study strongly suggests the demand for this type of educational activity has increased and that the Department of Education has an important role to play in this area in addition to the provision of correspondence education and supplying inspectors to provincial vocational schools. Even though current Departmental thinking proposes limiting its involvement to literacy programmes, it would do well to consider lessons learnt from literacy programmes in other developing countries. For example, there is ample evidence to suggest that teaching literacy to adults as a discrete subject divorced from other learning needs of strong immediate interest to the learners is inviting failure. So too is the preparation of literacy material from headquaters by educated people who do not appreciate the interest and concerns of the rural people. The point is that "appropriate" personnel (not necessarily "experts" from overseas) will need to be recruited to carry out this complex task and to engage the learners in the task of developing programmes which reflect their concerns and interest. More adequate resources than in the past will need to be appropriated to develop these programmes, as well as more realistic goals planned to ensure their success. Although the Department of Education has been involved in non-formal programmes in the past, and while some of the outcomes have been disappointing, the investment made in these can still be justified if the lessons learnt are put to good use in the future. The Department now has the opportunity to show what can really be done in this area. Does it have the commitment ?

Provincial Educational Planning

The dilemma of educational planning in PNG is that despite the considerable educational powers held by provincial authorities, educational planning in the provinces is still only in its infancy. Current assessments of the provincial planning training provided by the Education II project would indicate that there is still a considerable way to go before competence can be claimed. The urgency of the need to devlop competent educational planners from among citizens is best illustrated by the fact that of the educational plans developed by each of the provinces in 1983, three years later, virtually none had been implemented or updated. The national Department thus has the responsibility to continue to provide provinces with leadership and advice as well as the necessary support and training in the areas of planning and management skills. It has attempted to do this by establishing, in 1987, a new management and planning unit. Although at the present time, the operational plans for this unit look promising, its real success will lie in its ability to attract the necessary funding and through recruitment, provide experienced and competent staff to meet the challenging task of improving provincial competence in educational administration.

Lessons on Planning and Implementation of External Aid Projects

Both positive and adverse issues arising from the PNG experience, provide some general principles as to how external aid can become a more viable instrument in promoting future educational development activities.

1. Department of Education executives need to be familiar with and knowledgeable about the procedures and processes involved (i.e., both locally and with donors) in requesting and receiving external aid.

2. The planning and preparation of educational development projects must be consistent with national development priorities, and approved by the national government prior to (or at least parallel to) involving external donor agencies.

3. When educational responsibilities are shared between different levels of government, consultation and coordinating mechanisms need to be developed to facilitate exchange of ideas in the planning process.

4. In the planning of an educational development project, recognition and account of the lending policies of the potential donor must be made. Obviously consistency with development objectives between donor and recipient is a formula for success. But in situations where there is a serious conflict of interest between recipient and donor on a component, the recipient should agree to, where possible, finance the disputed

component from local resources so as not to jeopardize the remainder of the project. In the event the donor requires major alterations, thus compromising perhaps the entire project, another donor should be sought.

5. Due to limited resources, external aid to education should generally be reserved for development projects which will achieve maximum benefits system wide. Or alternatively, used in piloting developing projects in provinces which, in the future, may prove to have benefits system wide.

6. There is the need to develop an effective coordination and communication network with other government departments involved in the implementation of the projects.

7. There is a need to analyze the extent and the interrelationships of the problems which the project has to deal with, and develop strategies to deal with potential constraints.

8. The implementation of each component (i.e., sub-project) of the project has to be planned in detail. Such plans would provide a guide to sub-project development for project staff, more efficient use of technical assistance recruited, and continuity for the sub-project in the event of staff turnover.

9. Generally the project should be integrated into the existing structure of the Department of Education. In this way conflict and jealousies between permanent staff and project staff are usually avoided. This also facilitates decision-making through the normal line structure of the Department. In addition, project staff are sometimes able to suggest improvements in making the Departmental structure or procedures function more effectively.

10. Provision should be made for the evaluation of all development projects. Evaluation staff, through both formative and summatative means, are able to provide meaningful feedback for management on what needs to be corrected in terms of meeting

its proposed objectives. The spillover effects of the evaluative process to other departmental activities is also beneficial.

Evaluation and Research

Since the establishment of the Evaluation Unit in 1981, all aid-assisted projects as well as the Department generally, have benefitted considerably from the evaluation activities of this unit. In more recent times and with increasing frequency, the Department has called upon the scarce resources of the Unit to conduct activities other than evaluation. These activities range from writing country reports, organizing the planning for the Education IV project, briefing and advising the Minister/Secretary on a whole range of issues, and preparing press statements, etc. Findings of this study indicate that in spreading the resources of the Unit so thin, concern has been expressed that the primary function of the unit became "watered down" and involvement in other activities used important resources. It is important that the Department use the Unit for the function it was established to do - evaluate. Additional burdens extraneous to evaluation not only lessen its credibility, but also sap its morale and enthusiasm to perform effectively.

Education in Papua New Guinea has been fortunate in that a considerable body of educational research has been built up before and after independence. Since independence this has been possible due to the increased degree of cooperation between the Department of Education and the Faculty of Education at the University of Papua New Guinea. In particular, the Department has come to rely on the numerous research studies conducted by the Educational Research Unit located in the Faculty. Unfortunately, in the last decade the Department itself operating on a penny-pinching budget, has not contributed a great deal [42] other than to offer encouragement and cooperation for others in their endeavours. It is hoped that the Department will see the need to allocate a higher priority and more adequate resources in the future to its own educational research so as to aid and improve decision-making for its administrators. Equally important is that the Department encourage and support the research endeavours of senior professional and administrative staff. Finally, that the Department take the necessary steps to ensure that research findings are better utilized in the development and implementation of policy.

---

[42] although there are notable exceptions to this statement, particularly when external aid funds have been available

Implications for Further Research

This study was delimited to the experiences of PNG, however, it is important to be aware that the findings and issues which have emerged may also have wider implications for educational practice and research in the area of educational administration.

Obviously, since the acceptance and use of external aid is becoming more widespread than ever before, there is a need for an examination and evaluation into the experiences of other developing countries (particularly in the region) who have used external aid in the development of their educational systems. Case studies such as these could provide useful insights for all administrators into the conditions necessary for a successful project.

Complementary to the above, another area in which further research might be beneficial should be concerned with constraints to the implementation of educational development projects. Since the success and effectiveness of any project is fundamentally linked to its implementation, then efforts to identify and illuminate common constraints which impede that process would be of considerable assistance to the educational administrator.

This study revealed that external aid to education in PNG has come almost entirely from multilateral aid agencies. Further research could focus on the similarities and differences between multilateral aid and bilateral aid, specifically pointing out the strength and weaknesses of both. This would assist the educational administrators in developing countries in designing strategies to improve their processes for requesting, negotiating and evaluating educational aid. With regard to evaluating educational aid, further research could focus on testing the criteria employed in this study as well as the recommendations made to meet this need.

During the last decade, a large number of decentralization schemes have been launched in many countries, but particularly in newly independent countries. Further research could examine the effects of decentralization on coordinating external aid projects, particularly those planned at the national level. Analysis could focus on what factors within the decentralization process seem to affect aid coordination and the implementation of its projects.

Another area for further research might focus on the merits and disadvantages of various implementation models for educational projects. For example, a self-contained project model where the project is managed by an outside agency for a government department (e.g., like some UNESCO projects) without the host having a great deal of involvement or control, versus a fully integrated model where external aid is used to finance project staff and management which are fully "embedded" in the activities of a department. Development of a new compromise model which seeks to capitalize on the advantages of each model examined may provide educational administrators with an innovative way of implementing future projects.

This findings of this study suggests that donor influence in the planning and preparation of educational projects in PNG has, for the most part, been positive. However, not all countries have been so fortunate. Specific research in this area might focus on conditions and areas in which donor influence might be more likely to occur. Indeed this research might lead to the development of appropriate methodology and criteria for measuring donor influence on educational change.

Finally, since this research specifically focussed on the involvement and experiences of the recipient country with respect to external aid to educational development, there is also a need to examine more thoroughly the participation and involvement of donors in the aid process as it relates to education. They too need to be examined and questioned on their motives, roles and assumptions with regard to educational assistance.

BIBLIOGRAPHY

BIBLIOGRAPHY

Adams, Don
1970. **Education and Modernization in Asia.** London: Addison Wesley.

Ahmed, Manzoor
1983. "Critical Educational Issues and Non-Formal Education" in **Prospects.** 13:1

Allan, Bill and Keith Hinchliffe
1982. **Planning, Policy Anaysis and Public Spending.** Hampshire: Gower

Amarshi, A., K. Good and R. Mortimer,
1981. **Development and Dependency: The Political Economy of Papua New Guinea.** Melbourne: Oxford University Press.

Amuzegar, Jahangir,
1966. **Technical Assistance in Theory and Practice: The Case of Iran.** New York: Praegar.

Appelis, Ephraim
1985. "Southern Highlands Rural Development Project" in **Innovations in PNG Education.** Port Moresby:Department of Education

Ary, Donald, L.E.Jacobs and A.Razavick
1985. **Introduction to Research in Education.** New York:Holt, Rinehart and Winston.

Asher, Robert E,
1961. **Grants, Loans and Local Currencies: Their Role in Foreign Aid.** Washington, D.C.: The Brookings Institute.

Bacchus, M.Kazim.,
1987. **Educational Policy and Development Strategy in the Third World.** Aldershot (U.K.): Gower.

___________.
n.d. " Beyond the Numbers Game: Planning Secondary Education in a Developing Country. The Case of Papua New Guinea." Unpublished document.

___________.
1981. "Education for Development in Underdeveloped Countries" in **Comparative Education.** 17:2 (June)

___________.
1980. **Education for Development or Underdevelopment ?** Toronto: Wilfred Laurier University Press.

Bertalanffy, Ludwig von
1968. **General Systems Theory.** New York: George Brazillier.

Blaug, Mark
1970. **An Introduction to Economics of Education.** London: Allen Lane

Bogdan, Robert C and Sari Knoop Biklen
1982. **Qualitative Research for Education: An Introduction to Theory and Methods.** Boston: Allyn and Bacon.

Botsman, P.B.
1976. "Technology, Tradition and Tabu: The Planning of Tertiary Technical Education in Papua New Guinea" in **Papua New Guinea Education** by E.B.Thomas (Ed.).Melbourne:Oxford University Press.

Bowles, Samuel and Herbert Gintis
1976. **Schooling in Capitalist America.** New York: Basic Books.

Bray, Mark
1984. **Educational Planning in a Decentralized System. The Papua New Guinea Experience.** Port Moresby: Papua New Guinea University Press

Burke, Mavis E,
1975. "An Analysis of Canadian Educational Assistance to the Commonwealth Carribean Leeward and Windward Islands, 1960-1970." Unpublished Doctoral Dissertation, University of Ottawa.

Burrell, Gibson and Gareth Morgan
1979. **Sociological Paradigms and Organizational Analysis.** New Hampshire: Heinemann.

Cameron, Kim S and David A Whetten (eds.)
1983. **Organizational Effectiveness. A Comparison of Multiple Models.** New York: Academic Press.

Carnoy, Martin
1974. "Education for Development or Domination: A Theoretical Framework" in **Education as Cultural Imperialism.** New York: David Mackay Co.

———————
1982. "Education for Alternative Development" in **Comparative Education Review** (June) 160-177

Cerych, Ladislav,
1967. **The Integration of External Assistance with Educational Planning in Nigeria.** Paris: UNESCO, IIEP.

Christenson, James A and Jerry W Robinson (eds.)
1980. **Community Development in America.** Ames, Iowa: The Iowa State University Press.

Collins, T.S. and G.W.Noblit
1978. **Stratification and Resegregation: The Case of Crossover High School.** Memphis, Tennessee. Eric Document #157954

Conroy, John D.
1980. **Aid From the Recipient's Viewpoint: Disturbing Possibilities for Papua New Guinea.** IASER Discussion Paper No.29. Port Moresby: IASER

Coombs, Phillip H,
1985. **The World Crisis in Education: The View From the Eighties.** New York: Oxford University Press.

____
1968. **The World Educational Crisis: A Systems Analysis.** New York: Oxford University Press.

Coombs, Phillip H and K.Brigelow,
1965. **Education and Foreign Aid.** Cambridge: Harvard University Press.

Dahanayake, P.A.S.(ed.)
1982. **Post Independent Economic Development of Papua New Guinea.** Monograph 19. Port Moresby: IASER

________________ (ed.)
1985. **A Review of the Economy of Papua New Guinea.** Special Publication No.10 Port Moresby: IASER

Denzin, Norman K.
1978. **Sociological Methods.** New York: McGraw-Hill

Dodds, Tony and Ephraim Appelis
1983. **IASER External Evaluation of the Southern Highlands Rural Development Project: Non Formal Education and the Extension Services Support Unit.** Port Moresby:IASER

Downs, I
1980. **The Australian Trusteeship: Papua New Guinea 1945-1975** Canberra: Australian Government Publishing Service

Dye, Thomas R
1972. **Understanding Public Policy.** Englewood Cliffs,N.J.: Prentice-Hall.

Edwards, Edgar O and Michael P Todaro
1974. "Education, Society and Development: Some Main Themes and Suggested Strategies for International Assistance". **World Development.** 2:1 (January).

Eyrich, David E.
1983. **Provincial Planning in Education II: Process and Product.** Port Moresby: Department of Education (Evaluation Unit). September.

Frank, Charles R. and Mary Baird
1975. "Foreign Aid: Its Speckled Past and Future Prospects" in **International Organization.** 29:1.

Freire, Paulo
1973. **Pedagogy of the Oppressed.** New York: Seabury Press.

Geertz, Clifford
1973. "Thick Description: Toward an Interpretive Theory of Culture" in C.Geertz (ed.) **The Interpretation of Cultures: Selected Essays.** New York: Basic

Hasluck, Paul
1976. **A Time for Building.** Melbourne: Melbourne University Press.

Hurst, Paul
1983. "Key Issues in the External Financing of Education" in **Prospects.** 13:4

Gilliland, Martha W. and J.Richard Gilliland
1978. "Principles of General Systems Theory: Some Implications for Higher Educational Administration." in **Planning for Higher Education.** 6:5 (April).

Good, Carter V ,
1972. **Essentials of Educational Research. Methodology and Design.** 2nd ed. New York: Appleton-Century-Crofts.

Goodman, Raymond, Charles Lepani and David Morawetz
1985. **The Economy of Papua New Guinea. An Independent Review.** Canberra: Australian National University.

Gordon, R.L.
1975. **Interviewing: Strategy, Techniques and Tactics.** Homewood,Ill:Dorsey Press.

Goulet, Denis
1971. **The Cruel Choice: A New Concept in the Theory of Development.** New York: Atheneum.

Guba, Egon G.
1981. "Criteria for Assessing the Trustworthiness of Naturalistic Inquiries." **Educational Communication and Technology Journal.** 29:75-92.

____
1985. **Organization Theory and Inquiry. The Paradigm Revolution.** Beverly Hills, CA:Sage. 79-104

Hanf, Theodor, Karl Ammann, Patrick V Dias, Michael Fremerey and Heribert Weiland
1975. "Education: An Obstacle to Development Some Remarks About the Political Functions of Education in Asia and Africa" in **Comparative Education Review.** 19:1 (February).

Harbison, Frederick and Charles A. Meyers
1964. **Education, Manpower and Economic Growth: Strategies of Human Resource Development.** New York: McGraw-Hill

Herriott, Robert E and Neal Gross
1979. **The Dynamics of Planned Educational Change.** Berkeley: McCutchan.

Hultin, Mats
1984. "Researchers and Policy-makers in Education: The World Bank as Middleman in the Developing Countries" in **Educational Research and Policy. How Do They Relate?** by T. Husen and M. Kogan. Oxford: Pergamon

Hurst, Paul
1983. "Key Issues in the External Financing Of Education" in **Prospects.** 13:4

Husen,Torsten and Maurice Kogan
1984. **Educational Research and Policy. How Do They Relate?** Oxford: Pergamon

Illich, Ivan
1973. **Tools for Conviviality.** New York: Harper & Row.

Institute of Applied Social and Economic Research,
1979. **National Education Strategy: Papua New Guinea Education Plan. Review and Proposals.** Boroko: IASER. Monograph 9.

Jose, Vivencio R.
1982. **Mortgaging the Future: The World Bank and the IMF in the Philippines.** Quezon City: Foundation for Nationalist Studies

Kennedy, Mary
1978. "Generalizations of Findings from Single Case Studies." A Paper Presented at the American Educational Research Association Annual Meeting. Toronto, Ontario

Krassowski, Andrzej
1968. **The Aid Relationship.** London: Overseas Development Institute.

Lepani, Charles
1983. **How We Manage and Use Foreign Aid.** Port Moresby: *The Times* newspaper, 20 April. 12-13

Lincoln, Yvonna S. and Egon G Guba
1985. **Naturalistic Inquiry.** Beverly Hills: Sage.

Makis, Ephraim and P.A.S. Dahanayake
1985. **Foreign Aid in Papua New Guinea: Policy Issues and Perspectives.** IASER Discussion Paper No.48 Port Moresby: IASER

Matane, Paulius
1986. **A Philosophy of Education for Papua New Guinea.** Ministerial Committee Report. Port Moresby.

Mason, Edward S.
1964. **Foreign Aid and Foreign Policy.** New York: Harpers and Row.

McNeill, Desmond
1981. **The Contradictions of Foreign Aid.** London: Croom Helm.

Meek, Vincent L.
1982. **The University of Papua New Guinea: A Case Study in the Sociology of Higher Education.** St Lucia:University of Queensland Press

Meriam, B
1985. "The Case Study in Educational Research: A Review of Selected Literature" **The Journal of Educational Thought.** 19:3 (December).

Method, Francis J
1974. "National Research and Development Capabilities in Education." in **Education and Development Reconsidered** by F.C. Ward (ed.) New York: Praegar.

Mikesell, Raymond F
1968. **The Economics of Foreign Aid.** Chicago: Aldine

Morey, Nancy C. and F.Luthans
1984. "An Emic Perspective and Ethnoscience Methods for Organizational Research." **Academy of Management Review.** 9(1):27-36

Papua New Guinea
1986. "Five Years From Now and Beyond" a Non-Formal Education Workshop held at Loloata Island, 1-5 December 1986. mimeograph.

Papua New Guinea. Department of Education.,
1985. **Growth of Education Since Independence. 1975-1985.** Port Moresby: Government Printing Office.

_____ 1976. **Education Plan 1976-1980.** Port Moresby: Government Printing Office.

Papua New Guinea. National Planning Office
1984 **Medium Term Development Strategy. Education Strategy:Discussion Papers.** Port Moresby: Government Printing Office

_____ 1980. **Manual On Aid Administration.** Port Moresby: National Planning Office.

Parkinson, Nancy
1976. **Educational Aid and National Development.** London: Macmillan

Payer, Cheryl
1982. **The World Bank: A Critical Analysis.** New York: Monthly Review Press

Peters, Bevis F
1976. "Educational Development in Barbados: An Evaluation of External Assistance". Unpublished Doctoral Dissertation. Edmonton: University of Alberta.

Phillips, H.M.
1976. **Educational Cooperation between Developed and Developing Countries.**New York: Praeger.

________________,
1973. **Planning Educational Assistance for the Second Development Decade** Paris: IIEP.

Psacharopoulos, George
1985. **Planning of Education: Where Do We Stand.** Report No.EDT4. Washington D.C.: World Bank

Rist, R.C.
1982. "Methodological Rigor in Naturalistic Inquiry: Some Issues and Answers". **Education Administration Quarterly.** 18:2.

Romaine, Ralph
1985. **Lending in Primary Eduaction: Bank Performance Review, 1962-1983.** Education and Training Series. Washington D.C.: World Bank

Sachs, Ignacy
1971. "Transmission of Techniques and Skills in Foreign Aid" in **Foreign Aid To Newly Independent Countries** by Ester Boserup and Ignacy Sachs (eds). Paris: Mouton.

Scott, Richard
1981. **Organizations. Rational, Natural and Open Systems.** New Jersey: Prentice-Hall.

Seers, Dudley
1969. "The Meaning of Development" a paper presented at Eleventh World Conference of the Society for International Development. New Delhi.

Selltiz, Claire et al.,
1976. **Research Methods in Social Relations. 3rd ed.**New York: Holt, Rinehart & Winston.

Shaw, K.E.
1978. "Understanding the Curriculum: The Approach Through Case Studies". **Journal of Curriculum Studies.** 10:1:1-17

Shultz, Theodore
1977. "Investment in Human Capital" in **Power and Ideology in Education** by Gerome Karabel and A.H. Halsey (eds.). New York: Oxford University Press.

Smith, Peter
1985. "Colonial Policy, Education and Social Stratification, 1945-75" in **Education and Social Stratification in Papua New Guinea** by Mark Bray and Peter Smith (eds.). Melbourne:Longman Cheshire

Smyth, John A
1974. "Equity Criteria in Educational Planning" in **Education and Development Reconsidered** by F.C.Ward (ed). New York: Praeger.

Sobhan, Rehman
1982. **The Crisis of External Dependence.** London: Zed

Stake, Robert E.
1976. "The Case Study Method in Social Inquiry." **Educational Research.** 7:2:5-8.

Tilak, Jandhyala B.G.
1982. "Educational Planning and the International Economic Order". **Comparative Education.** 18:2

Todaro, Michael
1982. **Economics for a Developing World: An Introduction to Principles, Problems and Policies for Development. 2nd Ed.** Harlow, Essex: Longman.

UNESCO
1979. **Papua New Guinea. Basic Education for Rural Development.** Paris:UNESCO

Weeks, Sheldon
1986. "Evaluation of the East Sepik Rural Development Project." Evaluation Research Unit. mimeo.

____
1985. "East Sepik Rural Development Project" in **Inovations in PNG Education.**Port Moresby:Department of Education.

Williams, Peter
1976. "Education in Developing Countries: The View from Mount Olympus" in **Prescription for Progress? A Commentary on the Education Policy of the World Bank** by Peter Williams (ed).Windsor (UK): NFER.

Willower, D.J
1986. "Organization Theory and the Management of Schools" in Eric Hoyle (ed.) **The Management of Schools.** London:Kogan Page.

World Bank
1986. **Papua New Guinea. Country Economic Memorandum.** Washington D.C.: World Bank.

____
1980. **Education Sector Policy Paper 1980.** Washington D.C.: World Bank.

____
1980. **Annual Report 1980.** Washington D.C.: World Bank.

____
1979. **The World Bank and Education Projects.** Washington D.C.: World Bank.

________.
1974. **Education Sector Working Paper.** Washington D.C: World Bank.

Yeoman, Lynn
1986. **Teacher Education in Papua New Guinea: An Overview of Major Projects or Reviews Recently Undertaken to Identify Needs or Enhance Development.** Waigani: Department of Education.

Zachariah, Mathew
1985. "Lumps of Clay and Growing Plants: Dominant Metaphors of the Role of Education in the Third World, 1950-1980" in **Comparative Education Review** 29:1

________.
1970. "Educational Aid: A Bibliographic Essay and a Plea for New Lines of Enquiry". **Comparative Education.** 6:2 (June).

APPENDIX A

PNG'S EIGHT POINT IMPROVEMENT PLAN

1. A rapid increase in the proportion of the economy under the control of Papua New Guinean individuals and groups, and in the proportion of personal and property incomes that goes to Papaua New Guineans.

2. More equal distribution of economic benefits, including movement towards equalization of income among people and toward equilization of services among different areas of the country.

3. Dcentralization of economic activity, planning and government spending, with emphasis on agricultural development, village industry, better internal trade, and more spending channelled to local and area bodies.

4. An emphasis on small scale artisans, service and business activity, relying where possibly on Papau New Guinean forms of economic activity.

5. A more self reliant economy, less dependent for its needs on imported goods and services and better able to meet the needs of its people through local production.

6. An increasing capacity for meeting government spending needs from locally raised revenue.

7. A rapid increase in the active and equal participation of women in all forms of economic and social activity.

8. Government control and involvement in those sectors where control is necessary to achieve the desired kind of development.

APPENDIX B

STRATEGIC OBJECTIVES OF PNG'S NATIONAL PUBLIC EXPENDITURE PLAN

1. **Increasing Rural Wefare:** Sectoral programmes of small and medium scale activities aimed directly at providing economic opportunities or providing services to rural people. Government programmes falling into this category are: coastal fisheries programme, rural health programme and community (primary) education.

2. **Helping Less Developed Areas:** Programmes which focus on area development in less developed provinces or in less developed areas within provinces. The bulk of the projects in this group can be classified as Integrated Rural Development Projects - such as the Southern Highlands Integrated Rural Development Project.

3. **Improving General Welfare:** Programmes which improve the general level of well being of Papua New Guineans but not directed exclusively to urban or rural people. Also includes programmes aimed at dsiadvantaged groups such as women, the unemployed, youth, etc. Major programmes include hospital improvements, malaria control and the population programme.

4. **Increasing Economic Production:** This group includes all major economic investments, resource development and national infrastructural development. It is this group that the government would apply strictest economic benefit/cost criteria. Projects included in this group include National Highways, major forestry, fisheries and mining development and major hydro schemes.

5. **Improving Food Production, Subsistence and Nutrition:** All projects aimed at replacement of food imports and supplying urban markets with fresh food as well projects aimed at improving subsistence production and the general level of nutrition are included in this category.

6. **Improved Training and Increased Papua New Guinea Participation in the Economy:** This category covers all the secondary and post-secondary training of Papua New Guineans to increase their skills and involvement in the economy or in Government. Such programmes as technical education, University courses and plantation management training are included.

7. **Urban Management:** Proposals for National government expenditures in urban areas not elsewhere considered are included in this group. Particular emphasis is placed, however, on improved management using existing resources, and directing responsiblilty for management and funding of urban projects to urban dewellers, particularly in the large urban centres.

8. **Effective Administration:** This objective covers all the necessary additional administrative and technical support expenditures of the Government including central agencies such as the Department of Finance, the Prime Minister's Department and the Public Services Commision; public order agencies such as Police, Defence and Justice; and policy, administrative and research functions of other agencies.

9. **Environment Protection:** This covers all direct expenditures by the Government on environmental and conservation projects other than those fundedas part of a major resource development project.

APPENDIX C

LIST OF PERSONS INTERVIEWED

LIST OF PERSONS INTERVIEWED

1.	Mr. Peter Baki	Assistant Secretary, Curriculum Development, Department of Education.
2.	Dr. Mark Bray	Senior Lecturer in Planning, Faculty of Education, University of Papua New Guinea .
3.	Mr. Taina Dai	Executive Director, Papua New Guinea Teachers' Association.
4.	Mr. Rex Drage	Former Project Manager, Overseas Aid Unit, Department of Education.
5.	Mr. David Eyrich	Coordinator Evaluation Unit, Department of Education
6.	Mr. Roy Frost	Project Manager, Overseas Aid Unit, Department of Education.
7.	Mr. Robert Igara	First Assistant Secretary, Foreign Aid Management Division, Department of Finance & Panning.
8.	Dr. Lalta Kunjbehari	a/Superintendent, Management and Planning Unit, Department of Education.
9.	Mr. Arch McArthur	Former Project Manager, Department of Finance.
10.	T. McHugh	Former a/Assistant Secretary, Technical Education Division, Department of Education.
11.	Dr V.D. McNamara	Former Education Consultant, Department of Education.
12.	Mr. Pat Modakewau	a/Assistant Secretary, Teacher Education Division, Department of Education.
13.	Mr. David Molyneux	Project Manager, Technical Education Project, Department of Education.
14.	Mr. Ian Morris	Economist, Formerly PNG National Planning Office/ PNG Department of Finance.
15.	Mr. A.K. Neuendorf	a/Deputy Secretary, Department of Education.
16.	Mr. S.G. Roakeina	Secretary, Department of Education.
17.	Mr. K. Sengodan	Evaluation Unit, Department of Education.
18.	Mr. B.Paul Songo	Secretary, Department of Personnel Management.
19.	Mr. Goriola Sonola	Project Accountant, Department of Education.

20.	Frank Van Kolc	Assistant Secretary, Foreign Aid Management Division, Department of Finance and Planning.
21.	Dr. Sheldon Weeks	Director, Educational Research Unit, University of Papua New Guinea
22.	Dr.Michael Wilson	Former Dean, Faculty of Education, University of Papua New Guinea
23.	Mr. Alos Yagas	Coordinator, Overseas Organizations, Department of Education

APPENDIX D

SAMPLE INTERVIEW SCHEDULE

SAMPLE INTERVIEW SCHEDULE

The following is a sample list of questions designed to guide the interviews.

1. Why was this form of assistance given/received ?

   - was it in response to a specific request by the PNG Government ?

2. Was the assistance designed to meet special purposes ?

   - if so, what purpose(s) ?

3. Why, if at all, were certain forms/sources of external aid preferred over others ?

4. In identifying and planning development projects for possible external financing how would you rate the assistance/advice given to the country by external technical assistance (e.g., UNESCO missions, or World Bank)

   - which externally funded projects do you consider innovative ?

5. Please describe the procedures for requesting, negotiating and receiving some of the major types of assistance.

6. Have the loans/grants received been sufficient to meet the resource needs of the project(s) ?

7. Can you cite examples where the policies and priorities of donors have influenced Papua New Guinean educational policies and programme decisions ?

   - how do we overcome negative effects of donor influence on decisions ?

8. In your judgement, how flexible have the conditions attached to these loans been ?

9. What do you see as the most serious problems in the implementation of externally funded projects ? How can these be best overcome ?

10. What qualities (professional/personal) would you consider most desirable in a foreign 'expert' (personnel recruited to work in an aid project) ? In your judgement have past 'experts' met these expectations ? If not, how can the recruitment process be improved ?
11. Has the training provided under scholarships/fellowships been appropriate ?
12. In your judgement, [1]where, [2]how and [3]why has external aid made its greatest contribution to the efforts of educational development in Papua New Guinea ?
13. What modifications in the [1]procedures, [2]negotiations or [3]conditions of assistance would you suggest in order to realize the greatest potential of external aid in educational development efforts ?

APPENDIX E

PAPUA NEW GUINEA - COUNTRY INFORMATION

PAPUA NEW GUINEA - COUNTRY INFORMATION

Land Mass	462 840 sq km
Population	2 071 661
Population Growth Rate	2.3%
Formal Sector Wage Employment	200 962 (9.7% total)
Engaged in various activities in Informal Sector	1 202 373 (58% total)
Unemployed	255 148 (12.3%)
Gross Domestic Product	K1407.3 million (-0.6%) (Cnd$1936.4 million)
Colonial Power	Australia
Independence	September 16, 1975
Education	
% of GDP spent on Education	9.1% (1979)
% of National Budget spent on Education	19% (1979)
Primary Level - enrolments	351 171 (1985)
- no. schools	2358
Provincial High Schools (Grades 7-10)	
- enrolments	47 025 (1985)
- no. schools	113
National High Schools (Grades 11-12)	
- enrolments	1600 (1985)
- no. schools	4
Primary Teachers' Colleges	
- enrolments	1728 (1985)
- no. colleges	8
Secondary Teacher Colleges	
- enrolments	560 (1985)
- no. colleges	1